

FILED

2017 MAR 31 P 3:33

BEFORE THE PUBLIC UTILITIES COMMISSION

PUBLIC UTILITIES  
COMMISSION

OF THE STATE OF HAWAII

In the Matter of the Application of	)	
	)	
HAWAIIAN ELECTRIC COMPANY, INC.	)	Transmittal No. 17-02 (Decoupling)
	)	
For approval to modify the RBA Rate Adjustment	)	Effective
in Its Revenue Balancing Account Provision Tariff	)	Date: June 1, 2017
_____	)	

I

Hawaiian Electric Company, Inc. ("Hawaiian Electric" or "Company") files this transmittal to revise paragraph E (Tariff Sheet No. 92C) of its Revenue Balancing Account ("RBA") Provision tariff ("RBA Tariff") to revise the RBA Rate Adjustment by \$0.001193 from the current rate of \$0.021098 per kilowatt-hour ("kWh") to the new rate of \$0.022291 per kWh, effective June 1, 2017 through May 31, 2018. The RBA Rate Adjustment is based on the Company's RBA balance at the end of 2016 and the Company's Rate Adjustment Mechanism ("RAM") Revenue Adjustment for calendar year 2017.

II

Hawaiian Electric, whose principal place of business and whose executive offices are located at 900 Richards Street, Honolulu, Hawai'i, is a corporation duly organized under the laws of the Kingdom of Hawai'i on or about October 13, 1891, and now exists under and by virtue of the laws of the State of Hawai'i. Hawaiian Electric is an operating public utility

engaged in the production, purchase, transmission, distribution and sale of electricity on the island of O‘ahu.

### . III

Correspondence and communications in regard to this Transmittal No. 17-02 are to be addressed to:

Dean K. Matsuura  
Manager, Regulatory Rate Proceedings  
Hawaiian Electric Company, Inc.  
P. O. Box 2750  
Honolulu, Hawai‘i 96840

### IV

Hawaiian Electric seeks Commission authorization of this tariff transmittal pursuant to Sections 6-61-111, 6-61-74, 6-61-75, and 6-61-86 of the *Rules of Practice and Procedure before the Public Utilities Commission*, Hawai‘i Administrative Rules (“HAR”), Title 6, Chapter 61. The proposed tariff revisions are in accordance with the Final Decision and Order in Docket No. 2008-0274, Order No. 32735 in Docket No. 2013-0141 and other orders as explained herein.

### V

Pursuant to HAR §6-61-76, Hawaiian Electric incorporates by reference its latest available balance sheet and income statement for the twelve months ending February 28, 2017 filed with the Commission on March 30, 2017.

On August 31, 2010, the Commission issued its *Final Decision and Order* in Docket No. 2008-0274, approving the decoupling mechanism for the Hawaiian Electric Companies.<sup>1</sup> On December 29, 2010, the Commission issued its *Final Decision and Order* in Hawaiian Electric's 2009 test year rate case proceeding, Docket No. 2008-0083, allowing the Company to implement the decoupling mechanism and begin tracking target revenue and recorded adjusted revenue which serve as the baseline for future decoupling calculations. Beginning in 2011, Hawaiian Electric filed tariff transmittals to annually establish an RBA Rate Adjustment, which the Commission subsequently approved.<sup>2</sup> In its annual filing in 2013, the Company included in the RAM Revenue Adjustment the net recoverable costs of the Campbell Industrial Park ("CIP") combustion turbine unit 1 ("CT-1") and the Customer Information System ("CIS") not already included in rates, pursuant to the *Stipulated Settlement Agreement between the Hawaiian Electric Companies and the Division of Consumer Advocacy regarding Certain Regulatory Matters* ("Stipulated Settlement") in Docket No. 2008-0083, dated January 28, 2013, which the Commission approved with clarifications in Order No. 31126 on March 19, 2013.<sup>3</sup>

---

<sup>1</sup> The "Hawaiian Electric Companies" or "Companies" are Hawaiian Electric, Hawai'i Electric Light Company, Inc., ("Hawai'i Electric Light") and Maui Electric Company, Limited ("Maui Electric").

<sup>2</sup> Refer to Transmittal Nos. 11-02, 12-02, 13-03, 14-03, 15-03 and 16-01 filed March 31, 2011, March 30, 2012, March 28, 2013, March 31, 2014, March 31, 2015, and March 31, 2016 respectively, and approved in *Order Approving HECO's Tariff Filed on May 10, 2011, as Revised on May 26, 2011, Order No. 30418 Approving HECO's Tariff Transmittal Filed on March 30, 2012, as Revised on May 23, 2012, Order No. 31287 Consolidating Proceedings and Approving Multiple Tariff Transmittals, Order No. 32112 Consolidating Proceedings and Approving Tariff Transmittals, Order No. 32883 Consolidating Proceedings and Approving Amended Tariff Transmittals, as revised on June 3, 2015, and Order No. 33724 Consolidating Proceedings, Providing Clarifications, and Approving Tariff Transmittals As Amended*, respectively. For information on past years' filings as well as additional background information on decoupling, refer to the transmittals cited here.

<sup>3</sup> Order No. 31126 also approved the provisions of the Stipulated Settlement that, for only the 2014, 2015 and 2016 RAM periods, and only for Hawaiian Electric, the Company was allowed to accrue the 2014, 2015 and 2016 RAM Revenue Adjustments, effective January 1 through December 31 of the calendar year. In 2017, the RAM provisions revert to the prior method. As a result, the Company is proposing to amend tariff sheet No. 92D to remove subpart G, and tariff sheet No. 931 to reflect this change. Please see Attachment 1 for the proposed changes to tariff sheet No. 92D.

On May 31, 2013, the Commission issued Order No. 31289 in Docket No. 2013-0141 to open an investigative docket to review whether the decoupling mechanisms are functioning as intended, are fair to the Companies and their ratepayers, and are in the public interest, and named the Hawaiian Electric Companies and the Division of Consumer Advocacy of the Department of Commerce and Consumer Affairs (“Consumer Advocate”) to be parties in this proceeding.<sup>4</sup> The Commission later granted motions to intervene filed by the County of Hawai‘i, Hawaii Solar Energy Association, Blue Planet Foundation and Hawaii Renewable Energy Alliance. In Order No. 31484 (pages 4 and 16), the Commission stated that it would divide the issues in this docket into two categories, Schedule A and Schedule B, and address them pursuant to separate procedural schedules.

On February 7, 2014, the Commission issued Decision and Order No. 31908 on the Schedule A issues, which directed the modification of certain provisions of the decoupling mechanisms. These modifications included the following: 1) effective March 1, 2014, the Companies shall use the short term debt rate, as established in deriving the consolidated cost of capital in each of the Companies’ last full rate case, to compute interest on the outstanding RBA balances, and 2) the rate base RAM return on investment adjustment (“Rate Base RAM Adjustment”) shall be equal to the prior RAM period’s rate base RAM return on investment calculation plus 90 percent of the amount that the current RAM period’s rate base RAM return on investment calculation exceeds the prior RAM period’s rate base RAM return on investment calculation.<sup>5</sup> On February 28, 2014, the Companies filed amended tariffs implementing the

---

<sup>4</sup> See *Order No. 31289 Initiating Investigation*, issued May 31, 2013, in Docket No. 2013-0141.

<sup>5</sup> If the prior RAM period is a rate case test year, then the Rate Base RAM Adjustment shall be equal to 90 percent of the current RAM period’s rate base RAM return on investment calculation.

provisions of the decision and order and on March 28, 2014, the Commission approved the Companies' amended tariffs in Order No. 32001 in Docket No. 2013-0141.

In Decision and Order No. 31908, the Commission also ordered the Companies to investigate the possibility that they may be able to defer payment of income taxes on the accrued amounts of decoupling revenue and make recommendations as to deferred tax treatment. On May 6, 2014, the Companies notified the Commission that they received approval from the Internal Revenue Service ("IRS") effective January 1, 2014 to change their accounting method from a book method of RBA revenue recognition to a recognition method based on when rates are adjusted for the RBA, and on May 19, 2014, provided information on how they will implement the change to reduce the amount of interest to be accrued.

On March 31, 2015, the Commission issued Order No. 32735 in Docket No. 2013-0141, which directed the Companies to make certain modifications to their decoupling mechanisms to be applied beginning with the Companies' 2015 decoupling filings. Among other things, the Commission ordered the following:

- 1) The RBA shall be retained;
- 2) The RAM mechanism shall be modified to include a cap that shall be applied to the total annual RAM Revenue Adjustment. The cap shall limit the automatic component of RAM adjustment increases to an amount equal to or lower than the Gross Domestic Product Price Index ("GDPPI");
- 3) The 90% adjustment shall be removed in favor of the GDPPI cap;
- 4) The Commission will allow the Companies to apply for approval by the Commission, on a case by case basis, to recover revenues outside of and in addition to the capped

RAM revenues.<sup>6</sup> The Companies and the Consumer Advocate shall develop criteria for the Commission's review for recovery of these costs (which may include consolidated or "programmatic" baseline expenditures) through the RAM or the Renewable Energy Infrastructure Program ("REIP") surcharge;<sup>7</sup> and

- 5) The changes in items 1 through 4 above shall be made effective on an interim basis pending commission resolution of the proceedings concerning the Companies' Power Supply Improvement Plans in Docket No. 2014-0183.<sup>8</sup>

Among the modifications to the RAM, the Commission amended the RAM Revenue Adjustment to be the lesser of (a) the RAM Revenue Adjustment determined according to "existing" tariffs and procedures ("Original RAM Methodology") or (b) a RAM Revenue Adjustment Cap ("RAM Cap"). The RAM Cap shall be based on the target revenues<sup>9</sup> determined in accordance with the RBA and RAM tariffs times the cumulative annually compounded increase(s) in GDPPI for intervening years, adjusted to include applicable revenue taxes.<sup>10</sup> The RAM Cap will apply to the entire RAM Revenue Adjustment including the Operation and Maintenance ("O&M") RAM, Rate Base RAM (including major capital and baseline projects), and the Depreciation and Amortization RAM.<sup>11</sup>

---

<sup>6</sup> The Commission remained "mindful of cautions expressed by the parties regarding the possible consequence of implementing caps or limits on RAM revenue recovery" and recognized the Companies' "need to finance necessary capital investments[,]" while sharing concerns expressed by the Companies that increasing the revenue requirement by inflation alone is unlikely to provide the Companies with sufficient revenue to invest as needed to meet Hawai'i's goals while also providing the Companies a fair opportunity to earn their cost of capital. Order No. 32735 at 85-87.

<sup>7</sup> On June 15, 2015, in Docket No. 2013-0141, 1) the Companies filed their proposed *Hawaiian Electric Companies Standards and Guidelines for Eligibility of Projects for Cost Recovery through the RAM above the RAM Cap*, and 2) the Companies and the Consumer Advocate filed their *Joint Proposed Modified REIP Framework/Standards and Guidelines*.

<sup>8</sup> Order No. 32735 at 5-7.

<sup>9</sup> Order No. 32735 at 95-96.

<sup>10</sup> Order No. 32735 at 94.

<sup>11</sup> Order No. 32735 at 96.

For each of the Hawaiian Electric Companies, for the calculation of the RAM Cap for the 2015 RAM Revenue Adjustment and until issuance of a final decision and order in the next rate case for each Company, the target revenues that will serve as the basis for the incremented cap will be the 2014 annualized target revenues.<sup>12</sup> Following the issuance of a final decision and order in a rate case, the basis for the calculation of the RAM Cap shall be the target revenue determined in accordance with the RBA tariff based on the results of the Company's most recent final rate case decision.<sup>13 14</sup>

## VII

By this Transmittal, Hawaiian Electric proposes to revise its decoupling RBA Rate Adjustment from the current rate of \$0.021098 per kWh to the new rate of \$0.022291 per kWh, effective June 1, 2017 through May 31, 2018.

The Company calculated its RBA Rate Adjustment according to its RBA and RAM tariff provisions<sup>15</sup> and the provisions of Order Nos. 32735 and 32866. The 2017 RBA Rate Adjustment includes the recovery of the RBA balance at year end 2016 and the calculated RAM revenue adjustment for calendar year 2017. Approximately 32% percent of the RBA Rate Adjustment includes the recovery of the RBA balance at year end 2016, while approximately 68% of the RBA Rate Adjustment corresponds to the 2017 RAM amount. There are no adjustments to the RBA Rate Adjustment for earnings sharing revenue credits triggered for 2016 or for Commission-ordered major capital projects credits or baseline capital projects credits.

---

<sup>12</sup> Order No. 32735 at 95.

<sup>13</sup> Order No. 32735 at 96.

<sup>14</sup> On December 16, 2016, Hawaiian Electric filed its 2017 test year rate case in Docket No. 2016-0328 ("2017 Rate Case"). Upon receiving a final decision and order from the Commission, the following year's RAM will be calculated based on the target revenues established by the Commission's final decision and order in the 2017 Rate Case.

<sup>15</sup> Refer to the Hawaiian Electric Tariff Revised Sheet Nos. 92, 92A – 92C, Sheet No. 92D and Revised Sheet Nos. 93 and 93A – 93H.

(Refer to Schedule A of Attachment 2 described in Section VIII of this tariff transmittal.) Based on the revised rate, a monthly bill for a residential Hawaiian Electric customer using 500 kWh of electricity would increase by \$0.60.<sup>16</sup>

The 2017 RBA Rate Adjustment will replace the 2016 RBA Rate Adjustment in the Company's Revenue Balancing Account Provision tariff and, as more fully discussed below, reflects the RBA balance as of the end of 2016, and the RAM Revenue Adjustment based on a RAM Cap. The following sections explain the amounts that make up the 2017 RBA Revenue Adjustment.

#### RBA Balance

The RBA revenue balance results from the sales decoupling component of the Commission-approved decoupling mechanism, which breaks the linkage between the Company's sales and total electric revenue. The approved RBA tariff allows Hawaiian Electric to record certain revenues only at target revenue levels (i.e., those authorized in the 2011 test year rate case plus the effective RAM Revenue Adjustments, less any applicable earnings sharing and/or major or baseline capital project credits), independent of the level of sales experienced. The approved RBA tariff also requires interest to be recorded monthly to the RBA at the interest rate specified in accordance with Order No. 32001, dated March 28, 2014. As a result, effective March 1, 2014, the annual rate used to calculate interest on the RBA balance changed from 6% to 1.75%, which is the short term debt rate as established in computing the consolidated cost of capital in the Company's last full rate case. Additionally, based on Decision and Order No. 31908 and pursuant to IRS approval to change the tax treatment of its RBA revenues,

---

<sup>16</sup> The monthly bill impact for a household using 500 kWh with the revised rate would be \$11.15 as compared to \$10.55, based on the current rate.



effective January 1, 2014, the Company changed its basis for computing interest from a gross to a net-of-deferred income tax RBA balance.

The cumulative balance of the RBA at the end of 2016 was \$43.2 million, and consisted of revenues recorded in the RBA as a result of decoupling, net of the amounts previously recovered through the RBA Rate Adjustment, since the inception of decoupling at Hawaiian Electric in 2011. This is a decrease of \$2.2 million from the RBA balance at the end of 2015 of \$45.4 million, and was the result of Hawaiian Electric recovering \$51.0 million of the RBA balance through the RBA Rate Adjustment and recording \$49.2 million in revenues,<sup>17</sup> adjustments, and interest for 2016. Therefore, the 2016 year-end balance of \$43.2 million represents the unrecovered cumulative RBA balance and additional amounts due to a shortfall in revenues<sup>18</sup> resulting from lower sales in 2016. Because the revenues associated with the RBA balance have already been recorded, they have already been reflected in the Company's net income in those years and will not contribute to the Company's earnings in 2017. The 2016 year-end RBA balance of \$43.2 million is grossed-up to \$47.4 million to include revenue taxes.

Hawaiian Electric's 2016 recorded sales totaled 6,660.2 gigawatt-hours ("GWh"), which was 809.3 GWh, or 10.8% lower than the 7,469.5 GWh test year amount (based on the May 2010 forecast) adopted in the Hawaiian Electric 2011 test year rate case. The actual sales in 2016 continued to decline from 2015, 2014, 2013, 2012 and 2011 levels.<sup>19</sup>

---

<sup>17</sup> This represents the difference between target revenues and recorded adjusted revenues, plus any adjustments for 2016.

<sup>18</sup> That is, "recorded adjusted revenue" as defined in the RBA Tariff.

<sup>19</sup> The actual sales for 2011 totaled 7,242.4 GWh, a difference of -227.1 GWh, or -3.0%, from the test year estimate. The actual sales in 2011, 2012, 2013, 2014, 2015 and 2016 were 7,242.4 GWh, 6,976.0 GWh, 6,858.5 GWh, 6,781.7 GWh, 6,754.1 GWh and 6,660.2 GWh respectively. It should be noted that, if the 2011 test year sales estimate had been lower (e.g., closer to actual sales for 2011), then the current RBA balance would have been lower, but the interim and final base rates resulting from the rate case would have been higher. As a result, the net impact on customers over the period between rate cases would have been the same.

The residential and commercial sectors both experienced lower sales in 2016 compared to 2011 test year levels, with the larger shortfall of 23.1% in the residential sector where customers decreased their average monthly usage by 25.0%, as compared to the commercial sales shortfall of 6.2% (see Table 1 below).

Table 1  
Comparison of TY2011 to Actuals

	TY2011	2011 Actuals	2012 Actuals	2013 Actuals	2014 Actuals	2015 Actuals	2016 Actuals	Diff Bw 2016 and TY2011	% Diff
<b>Residential Sector</b>									
Sales (GWh)	2,054.5	1,925.0	1,776.8	1,667.3	1,611.1	1,626.9	1,580.4	(474.1)	-23.1%
Customers	262,931	263,023	264,041	265,372	266,923	268,842	269,888	6,957	2.6%
Average Monthly Use (kWh/Customer)	651	610	561	524	503	504	488	(163)	-25.0%
Renewable Generation GWh Impacts <sup>1</sup>	9.1	21.1	66.5	177.2	281.5	353.5	418.9	409.8	4487.4%
Energy Efficiency Impacts (GWh) <sup>2</sup>	187.6	267.6	320.0	363.0	401.4	434.7		247.1	131.7%
Electricity Price (Nominal) ¢/kWh	25.59	32.04	35.10	34.62	35.48	28.02	26.07	0.48	1.9%
<b>Commercial Sector</b>									
Sales (GWh)	5,415.0	5,317.4	5,199.2	5,191.2	5,170.5	5,127.2	5,079.8	(335.2)	-6.2%
Customers	33,713	33,611	33,541	33,549	33,800	33,657	33,844	131	0.4%
Renewable Generation GWh Impacts <sup>1</sup>	30.6	34.2	57.2	80.3	105.8	145.3	169.8	139.2	454.6%
Energy Efficiency Impacts (GWh) <sup>2</sup>	347.8	359.7	405.4	436.8	475.0	514.5		166.7	47.9%
Electricity Price (Nominal) ¢/kWh	20.78	27.97	30.64	29.64	30.22	23.02	20.75	(0.03)	-0.1%
Total Sales (GWh)	7,469.5	7,242.4	6,976.0	6,858.5	6,781.7	6,754.1	6,660.2	(809.3)	-10.8%
% Difference		-3.0%	-3.7%	-1.7%	-1.1%	-0.4%	-1.4%		
<b>Weather</b>									
Cooling Degree Days <sup>3</sup>	4,780	4,954	4,532	4,506	4,909	5,082	4,788	8	0.2%
Average Wet Bulb Temperature (degrees)	69.7	70.0	68.9	68.8	69.6	70.6	69.6	(0.1)	-0.1%

<sup>1</sup> Cumulative impacts are from systems installed under the NEM, SIA, CGS, CSS and FIT tariffs.

TY2011 did not include impacts under FIT. Data subject to change.

<sup>2</sup> TY2011 estimates are consistent with Docket 05-0069. Actuals include impacts provided by Hawaii Energy and are subject to change.

Complete calendar year 2016 data was not available at time of this filing and therefore calendar year 2015 was used in the comparison to TY2011

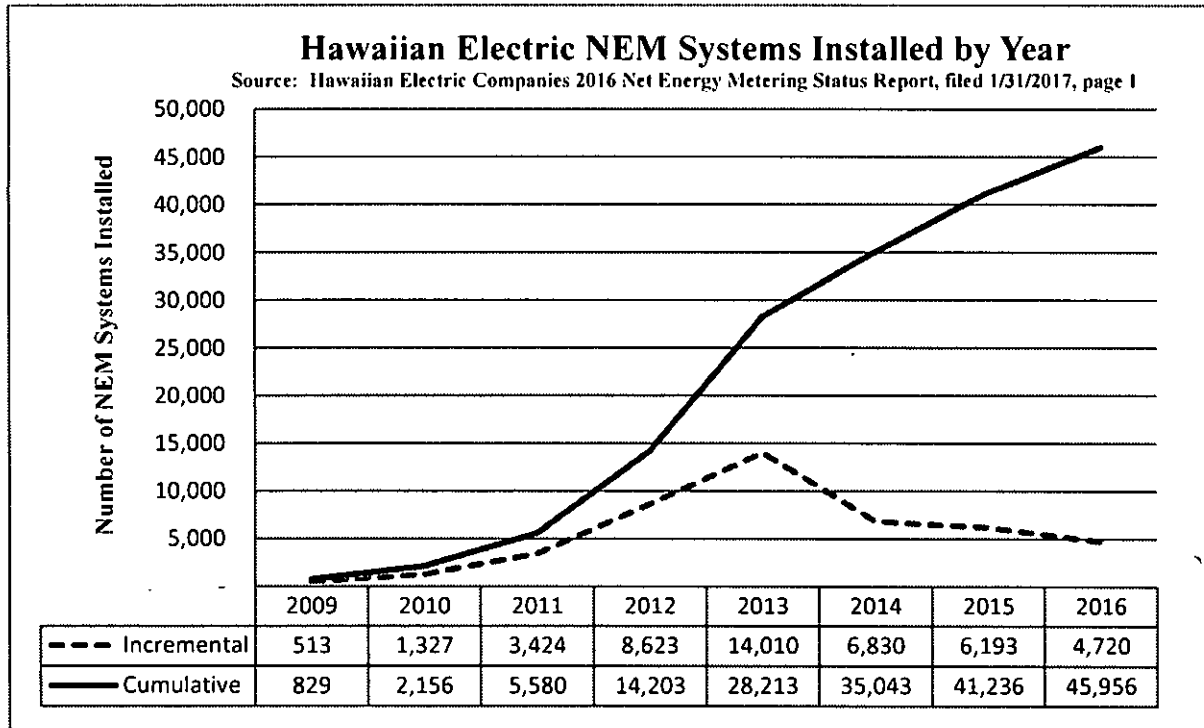
<sup>3</sup> A cooling degree day is a measurement designed to reflect the demand for energy to cool a home or business.

It is calculated by subtracting 65 from the day's average temperature.

Several factors contributed to the lower than forecasted sales in 2016. First, higher penetration of customer-sited renewable generation systems installed under the Company tariffs such as Net Energy Metering (“NEM”), Standard Interconnection Agreements (“SIA”), Customer Grid-Supply (“CGS”), Customer Self-Supply (“CSS”) and Feed-In-Tariffs (“FIT”) had a significant impact on sales. The cumulative 2016 impacts of systems installed under NEM, SIA, CGS, CSS and FIT<sup>20</sup> were higher than the 2011 test year assumed impacts by 4,487.4% for the residential sector and 454.6% for the commercial sector. As shown in the 2016 Net Energy

<sup>20</sup> The impacts to sales under FIT are associated with the output from the system that offsets a customer's load as opposed to what is sold to the Company.

Metering Status Report filed January 31, 2017, page 1, the cumulative number of NEM installed systems on Hawaiian Electric's grid jumped from 829 in 2009 to 45,956 in 2016, a 5,444% increase over seven years. Refer to the graph below for the number of NEM systems installed by year.



Second, the actual impact to sales from the installation of energy efficient technologies was also greater than the 2011 test year rate case forecast. Impacts consistent with those filed in the Company's Energy Efficiency proceeding, Docket No. 05-0069, were used to develop the 2011 rate case forecast as information on future program impacts were not available at that time. The differences for the years 2011 through 2015<sup>21</sup> between the Public Benefits Fund Administrator's programs and those identified in the Energy Efficiency docket resulted in

<sup>21</sup> Energy efficiency impacts were not available for calendar year 2016. Table 1 provides energy efficiency impacts through calendar year 2015.

impacts that were greater than the demand side management (“DSM”) impact assumed in the 2011 test year.

The decline in sales in 2016 was partially offset by the effects of warmer and more humid weather compounded by relatively lower electricity prices driven by lower fuel oil prices and load from new construction projects.

In summary, declining sales in 2016 created a shortfall in electric sales revenue and the recovery of the Company’s fixed costs for the provision of electric service to its customers. Overall, the RBA balance decreased to \$43.2 million at the end of 2016.

#### RAM Revenue Adjustment

Order No. 32735 states that the RAM Revenue Adjustment will be the lesser of (a) the RAM Revenue Adjustment calculated according to the existing tariffs and procedures at the time of the issuance of the order (“Original RAM Methodology”) or (b) a RAM Cap. For the 2017 decoupling annual filing, the Company calculated the RAM Revenue Adjustment to be higher using the Original RAM Methodology, thereby triggering the use of the RAM Cap for the 2017 RAM Revenue Adjustment. See Schedule A1 and the summary table below.

	<u>RAM Cap<sup>22</sup></u>	<u>Original RAM Methodology<sup>23</sup></u>
2017 RAM Revenue Adjustment	\$101.1 million	\$128.2 million

---

<sup>22</sup> 2017 RAM Cap \$101,131,452 is calculated as 2017 RAM Cap (\$97,742,487) + Exceptional And Other Matters (\$3,388,964). See Schedule A1.

<sup>23</sup> 2017 RAM Under Existing Tariffs \$128,162,481 calculated as: O&M RAM (\$23,380,733) + Rate Base RAM-Return on Investment (\$66,238,985) + Depreciation and Amortization Expense (\$47,364,714) less an adjustment for Change in On-cost Clearing Allocation (-\$8,821,951). See Schedule A1.

Order No. 32866, paragraph 18 required the Company to adjust its 2015 RAM Revenue Adjustment to reflect the O&M expense reduction impact associated with the change in on-cost clearing allocation identified by the Company in its response to CA-IR-1(b). The RAM calculation for 2015 included an adjustment based on the actual 2014 O&M impact due to the change in on-cost clearing allocation. Therefore, in calculating the 2017 RAM revenue adjustment under the Original RAM Methodology, the adjustment has been updated to reflect the actual 2016 O&M impact of the change in on-cost clearing allocation. See HECO-WP-A1-001.

The sections below further explain the calculations of both RAM Revenue Adjustment methodologies.

### **RAM Revenue Adjustment Cap**

Order No. 32735 at 95-96, explains that the RAM Cap will be based on the 2014 adjusted target revenues multiplied by the cumulative annually compounded increases in the GDPPI for intervening years, adjusted to include applicable revenue taxes. As shown in Schedule J in Attachment 2, the adjusted 2015 Target Revenues is \$637.4 million. This amount is then added to the adjusted 2016 RAM Cap increase of \$9.6 million<sup>24</sup>. This results in a 2016 target revenue total of \$646.9 million. The 2016 target revenue total is then multiplied by the 2017 GDPPI of 2.00% to calculate the 2017 RAM Cap increase (excluding Exceptional and Other Matters) of \$12.9 million.

The incremental 2017 RAM Cap increase of \$12.9 million is then added to the adjusted 2016 RAM Cap of \$84.8 million to calculate the 2017 RAM Cap total of \$97.7 million. \$3.4 million in “Exceptional and Other Matters” reflecting the RAM calculations for the CIP CT-1 Regulatory Asset and CIS deferred project cost is then added to the \$97.7 million to arrive at a Total 2017 RAM Revenue Adjustment Cap of \$101.1 million.

### **RAM Revenue Adjustment- Original RAM Methodology**

The RAM Revenue Adjustment determined under the Original RAM Methodology totaled \$128.2 million. Below is a description of the three components: 1) O&M RAM, 2) Rate Base RAM, and 3) Depreciation and Amortization RAM Expense. Because the total of the three components is higher than the 2017 RAM Cap shown above, the RAM Cap is applied for the 2017 RAM Revenue Adjustment.

---

<sup>24</sup> The \$9.6 million 2016 RAM Cap increase is calculated by multiplying the 2015 target revenues of \$637.4 million by the 2016 GDPPI of 1.5%, as shown in Transmittal 16-01, Attachment 2, Schedule J, filed on March 31, 2016.

### O&M RAM Adjustment

The 2017 O&M RAM adjustment is \$23.4 million, as calculated under the Original RAM Methodology. It includes the adjustments to the Commission-approved 2011 test year rate case labor (bargaining unit only) and certain non-labor costs. As specified in the Rate Adjustment Mechanism Provision tariff, these adjustments, covering the escalation in costs for 2012 through 2017, are based on bargaining unit wage increases as provided for in the current Collective Bargaining Agreement<sup>25</sup> with labor productivity offsets, plus applicable payroll taxes, and the GDPPI to escalate certain non-labor base expenses. (Refer to Attachment 2, Schedule C of this tariff transmittal.) The 2017 O&M RAM adjustment amount is higher than in 2016 because it covers six years of inflation and wage increases compared to the 2016 filing, which covered those increases for only five years.

Non-bargaining unit labor is not subject to escalation in the RAM. Further, the non-labor cost escalation rate does not apply to any fuel, purchased power, Integrated Resource Planning (“IRP”)/DSM, pension, Other Post-Employment Benefits (“OPEB”), Clean Energy/Renewable Energy Infrastructure or any costs that are subject to recovery through separate rate tracking mechanisms.

### Rate Base RAM and Depreciation and Amortization RAM

The rate base RAM return on investment adjustment (“Rate Base RAM Adjustment”) totals \$66.2 million, and the depreciation and amortization RAM expense is \$47.4 million, as calculated under the Original RAM Methodology. The 2017 Rate Base RAM Adjustment

---

<sup>25</sup> The current Collective Bargaining Agreement was ratified by the IBEW, Local 1260, on November 1, 2012 and reflects a 3.00% increase effective January 1, 2014, January 1, 2015, and January 1, 2017, and a 3.25% increase effective January 1, 2016, based on January 1, 2013 wage rates.

(\$66.2 million) is larger than the 2016 Rate Base RAM Adjustment (\$54.8 million) because the 2017 return reflects an aggregation of the 2016 and 2017 plant addition impacts.

The \$66.2 million Rate Base RAM Adjustment covers the return for the following investments:

- \$241.3 million in plant investments that went into service in 2016 and are currently serving customers; these included in part the following<sup>26</sup>:
  - \$120 million to modernize and improve O‘ahu’s electric grid and technology platform;
  - \$81 million to improve the quality of the Company’s customer experience, develop innovative energy solutions and serve new loads;
  - \$19 million to reliably integrate more renewable energy and achieve clean energy portfolio standards; and
  - \$21 million for environmental, safety, and other compliance.
- \$266.5 million in plant investments that went into service in 2015 and are currently serving customers.
- \$269.3 million in plant investments that went into service in 2014 and are currently serving customers.
- \$272.8 million in plant investments that went into service in 2013 and are currently serving customers.
- \$256.0 million in plant investments that went into service in 2012 and are currently serving customers.

---

<sup>26</sup> For more details, please see the *Exemption From and Modification of General Order No. 7, Paragraph 2.3(g), Relating to Capital Improvements, Capital Projects Completed in 2016* (“2016 G.O. 7 Report”) in Docket No. 03-0257, dated March 30, 2017.

- \$169.6 million in investments that went into service in 2011 and are currently serving customers.
- \$247.1 million in 2017 baseline (based on a five-year historical average) and major project additions included in the rate base RAM, on a simple average RAM year basis (i.e., one-half of the \$247.1 million, or \$123.5 million, is added to the actual 2016 plant balances in order to estimate the return on rate base).
- Additional CIP CT-1 and CIS project costs as approved in the Stipulated Settlement, as explained earlier.

These plant additions, which increase the rate base RAM, are partially offset by increases in accumulated depreciation, contributions in aid of construction (“CIAC”) and accumulated deferred income taxes (“ADIT”). The increase in CIAC reflects the actual CIAC as of December 31, 2016, plus a five-year average of the baseline CIAC, plus estimated major project contributions, less amortization of CIAC for 2017. The ADIT continued to increase primarily as a result of accelerated tax deductions taken for bonus depreciation resulting from the Protecting Americans from Tax Hikes (“PATH”) Act of 2015.

The Depreciation and Amortization RAM adjustment is primarily due to increases in the depreciable asset base. Depreciable plant in service increased by approximately \$1,182.0 million from the 2011 rate case to year-end 2016,<sup>27</sup> which accounts for approximately \$38.9 million of the \$47.4 million 2017 depreciation and amortization RAM adjustment shown in Schedule E.<sup>28</sup>

---

<sup>27</sup> This increase consisted of \$241.3 in 2016 plant additions (offset by \$25.8 million in retirements), \$266.5 million in 2015 plant additions (offset by \$23.6 million in retirements), \$269.3 million in 2014 plant additions (offset by \$46.2 million in retirements), \$272.8 million in 2013 plant additions (offset by \$36.9 million in retirements), \$256.0 million in 2012 plant additions (offset by \$23.1 million in retirements), and the additional CIP CT-1 cost of \$31.7 million that was not previously included in the 2011 test year rate base

<sup>28</sup> This is illustrated by applying a composite depreciation rate of 3.29% to the \$1,182.0 million increase in depreciable asset base, and grossing up for revenue taxes.



### Earnings Sharing Calculation Issues

Two issues in this year's decoupling filing related to earnings sharing are discussed below along with the Company's proposals to address these issues:

- In July 2016, the Company discovered that an incorrect programming of a report developed when the new Customer Information System was implemented resulted in an overstatement of interest expense accrued since May 2012. The overstatement was deemed immaterial for financial statement purposes and reflected in 2016 results; however, had the interest expense been adjusted for in 2012, the amount of 2013 earnings sharing revenue credit would have been slightly higher. The Company is proposing a one-time adjustment for an adjusted 2013 earnings sharing revenue credit in the amount of a \$15,526 refund, which includes interest, to customers. For more details on the calculation, please see Attachment 2, Schedule A, H1, and HECO-WP-H1-001.
- Since the Earnings Sharing Mechanism was implemented in the decoupling filings in 2012 for Hawaiian Electric and in 2013 for Hawai'i Electric Light and Maui Electric, actual recorded cost of capital has been used for earnings sharing calculations. This practice was based on discussions with the parties and has resulted in the benefit of lower cost of capital being passed to customers via the Earnings Sharing Mechanism. However, this year it was noted that in its Final Decision and Order in Docket No. 2008-0274, page 61, filed on August 31, 2010, the Commission stated:

“Capital ratios and costs rates will be retained as authorized in either the most recently issued rate case interim or final decision, and synchronized interest will be updated using methods employed in that last rate case for purposes of the earnings sharing mechanism.”

In reviewing the previous years' decoupling filings, in most years, the use of actual recorded cost of capital has resulted in larger cost savings being passed to customers through the Earnings Sharing Mechanism. Please see HECO-WP-H-008 for more details.

The Company is proposing to revise Sheet No. 93D, subpart a, in its Rate Adjustment Mechanism Provision tariff, as shown in Attachment I, to formally incorporate the use of the actual cost of capital in the earnings sharing calculation. This clarification would not impact any of the previous years' decoupling filings.

#### RBA Revenue Adjustment

In total, Hawaiian Electric's 2017 RBA Revenue Adjustment is \$148.5 million, consisting of \$47.4 million for the RBA balance for year-end 2016 and \$101.1 in RAM revenue adjustment for 2017.

#### Customer Billing Adjustments

The Company also proposes to delete a provision in the Revenue Balancing Account Provision tariff on entries to the RBA to correct billing errors. In Transmittal Nos. 15-03, 15-04 and 15-05, the Consumer Advocate recommended that the "extensive manual analyses of out-of-period customer billing adjustments, which [have] historically been undertaken by the Hawaiian Electric Companies, should be discontinued effective in 2015" and stated the following:

Customer billing adjustments will flow naturally through the billed revenue accounts feeding into the calculation of recorded, adjusted revenues on Schedule B2 and the proposed elimination of the manual analysis of each adjustment to determine prior period months affected will significantly simplify RBA accounting efforts for the Hawaiian Electric Companies and corresponding review efforts for the Consumer Advocate and the Commission. The Hawaiian Electric Companies should continue to report each customer billing adjustment within its standard data responses prepared and submitted with each monthly RBA packet,

so that individual adjustments can be selected for review by the Consumer Advocate, as necessary.

The Company agrees with the Consumer Advocate's recommendation and proposes a threshold on the Consumer Advocate's reporting recommendation, as explained in HECO-WP-B-017 and therefore proposes to delete the associated tariff provision on Revised Sheet No. 92B of the Revenue Balancing Account Provision tariff regarding entries to the RBA to correct individual billing errors.

#### Special Medical Needs Pilot Program

By virtue of the Commission's approval of Transmittal No. 17-01, the Special Medical Needs Pilot Program ("SMNPP") rates in the Schedule R Residential Service tariffs will be authorized based rates effective April 1, 2017.<sup>29</sup> Thus, the revenue from the lower SMNPP rates in the Schedule R Residential Service tariffs will be included in the recorded adjusted revenue<sup>30</sup> as a credit entry into the RBA. Because the base rates for the SMNPP customers will be lower than before for these customers, the recorded adjusted revenue for the Companies entered into the RBA will be lower. As a result, the difference between target revenue and recorded adjusted revenue will be larger and will be reflected as a larger RBA balance, which in turn will be recovered through the RBA Rate Adjustment. The flow through of the larger difference between target revenue and recorded adjusted revenue resulting from the SMNPP rates in the Schedule R Residential Service tariffs would occur in accordance with the approved Schedule R (effective

---

<sup>29</sup> On March 28, 2017, the Commission issued Decision and Order No. 34467, approving Transmittal No. 17-01, subject to certain conditions, and the SMNPP rates, effective April 1, 2017.

<sup>30</sup> The recorded adjusted revenue is defined to include the electric sales revenue from authorized base rates, plus revenue from any authorized interim rate increase, plus revenue from any RBA rate adjustment, but excluding revenue for fuel and purchased power expenses, IRP/DSM, any Commission Ordered one-time rate refunds or credits or other surcharges, and adjusted to remove amounts for applicable revenue taxes.

April 1, 2017) and the currently approved RBA Provision tariffs. Therefore, no changes to the Companies' tariffs would be required.

On January 18, 2017, the Hawaiian Electric Companies filed Transmittal No. 17-01, proposing a provision for the Special Medical Needs Pilot Program in each company's Schedule R tariff. The proposed tariff included discounted per kilowatt-hour rates on a pilot basis for up to 2,000 customers with special medical needs. Transmittal No. 17-01 stated the following: "The Companies also request that the bill adjustments provided to customers under the SMNPP be included as a reduction to recorded adjusted revenues for the determination of the monthly entry to the revenue balancing account per the Revenue Balancing Account Provision."<sup>31</sup>

Regarding the revenue balancing account, Decision and Order No. 34467 stated the following:

Lastly, the Companies request that the commission "[a]llow the bill adjustments provided to customers under the [Special Medical Needs Pilot Program] Provision to be included as a reduction to recorded adjusted revenues for the determination of the monthly entry to the revenue balancing account per the Revenue Balancing Account Provision."

The Companies' transmittal, filed pursuant to HAR § 6-61-111, is limited to the proposed tariff revisions to their existing Schedule R. Thus, the Companies' Revenue Balancing Account-related request is outside the scope (i.e., "beyond the scope") of this non-docketed, transmittal matter. Accordingly, the commission takes no action on: (1) the Companies' Revenue Balancing Account-related request; or (2) the Consumer Advocate's related recommendations thereto.

[Footnotes omitted.] Decision and Order No. 34467 at 25-26.

The Companies appreciate the Commission's timely order approving the SMNPP rates proposed in Transmittal No. 17-01. Regarding the flow through of revenue reductions resulting from the approval of the Special Medical Needs Pilot Program rates in the Schedule R Residential Service tariffs into the Revenue Balancing Account, no change to the Companies'

---

<sup>31</sup> Transmittal No. 17-01 at 10.

current Revenue Balancing Account (“RBA”) Provision tariffs would be required. The RBA

Provision tariffs state the following:

The purpose of the Revenue Balancing Account (“RBA”) is to record 1) the difference between the Hawaiian Electric Company’s target revenue and recorded adjusted revenue, and 2) monthly interest applied to the simple average of the beginning and ending month balances in the RBA. In addition, the recovery provision of this tariff provides for collection or return of the calendar year-end balance in the RBA and recovery or refund of the RAM Revenue Adjustment, Earnings Sharing Revenue Credits, Major Capital Projects Credits, and Baseline Capital Projects Credits provided in the Rate Adjustment Mechanism (“RAM”) Provision over the subsequent June 1st through May 31st period.

Hawaiian Electric RBA Provision tariff, Revised Sheet No. 92, effective June 1, 2013; Maui Electric RBA Provision tariff, Revised Sheets 97 (Maui), 108 (Lana‘i), and 152 (Moloka‘i), effective June 1, 2013; Hawai‘i Electric Light RBA Provision tariff, Revised Sheet No. 91, effective June 1, 2013.

The RBA Provision tariffs define target revenue as “the annual electric revenue approved by the Public Utilities Commission in the last issued Decision & Order in the Company’s most recent test year general rate case,...” with certain exclusions and additions as specified in the tariff.<sup>32</sup>

Regarding entries to the RBA and “recorded adjusted revenue,” the RBA Provision tariffs state the following:

Entries to the RBA will be recorded monthly. A debit entry to the RBA will be made equal to the target revenue as defined in Section B. above, times the appropriate monthly allocation factor in the table above. A credit entry to the RBA will be made equal to the recorded adjusted revenue. The recorded adjusted revenue is defined to include the electric sales revenue from authorized base rates, plus revenue from any authorized interim rate increase, plus revenue from any RBA rate adjustment, but excluding revenue for fuel and purchased power

---

<sup>32</sup> Hawaiian Electric RBA Provision Tariff, Revised Sheet No. 92A, effective January 1, 2014; Maui Electric RBA Provision tariff, Revised Sheets No. 97A (Maui), 108A (Lana‘i), and 152A (Moloka‘i), effective June 1, 2013; Hawai‘i Electric Light RBA Provision tariff, Revised Sheet No. 91A, effective June 1, 2013.

expenses, IRP/DSM, any Commission Ordered one-time rate refunds or credits or other surcharges, and adjusted to remove amounts for applicable revenue taxes.

[Emphasis added.] Hawaiian Electric RBA Provision tariff, Revised Sheet No. 92B, effective March 1, 2014; Maui Electric RBA Provision tariff, Revised Sheets No. 97B (Maui), 108B (Lana'i), and 152B (Moloka'i), effective March 1, 2014; Hawai'i Electric Light RBA Provision tariff, Revised Sheet No. 91B, effective March 1, 2014.

Accordingly, since the revenue from the lower SMNPP rates in the Schedule R Residential Service tariffs will be included in the recorded adjusted revenue as a credit entry into the RBA, no changes to the Companies' tariff are being made.

## VIII

### List of Attachments and Schedules

In Attachment 1 of this tariff transmittal, Hawaiian Electric submits its proposed revisions to its Revenue Balancing Account Provision tariff, including the proposed RBA Rate Adjustment rate in Section E of Revised Sheet No. 92C,<sup>33</sup> and its proposed revisions to the Rate Adjustment Mechanism Provision tariff, including the revision to Sheet No. 93D<sup>34</sup> discussed on pages 17-18. Attachment 1A provides the tariff sheets for the RBA and RAM Provision tariffs in blackline version.

Attachment 2 provides the calculation of the RBA Rate Adjustment in the following schedules, along with supporting workpapers:

Schedule A – Determination of 2017 RBA Rate Adjustment (Summary)

Schedule A1 – Determination of Total RAM Revenue Adjustment Allowed

Schedule B – Summary of Accumulated Revenue Balancing Account

---

<sup>33</sup> The revision to Sheet No. 92D is described in footnote 3 herein.

<sup>34</sup> The revision to Sheet No. 93I is described in footnote 3 herein.

Schedule B1 – Determination of Target Revenues

Schedule B2 – Determination of Recorded Adjusted Revenues

Schedule C – Determination of O&M RAM Adjustment

Schedule C1 – Summary of Operations and Maintenance Labor and Non-Labor Expense

Schedule C2 – Non-Labor Exclusion Adjustment for O&M RAM

Schedule D – Determination of Rate Base RAM Adjustment – Return on Investment

Schedule D1 – Determination of Rate Base RAM Adjustment – Change in Rate Base

Schedule D2 – Determination of Baseline Capital Projects Additions

Schedule D3 – Determination of Major Capital Project Additions

Schedule D4 – Determination of Adjusted Recorded Deferred Income Taxes

Schedule E – Determination of Depreciation and Amortization RAM Adjustment

Schedule F – Determination of Change in Deferred Income Taxes

Schedule F1 – Determination of Tax Depreciation

Schedule F2 – Tax Depreciation on Major Capital Projects Additions

Schedule G – CIAC Summary

Schedule G1 – Baseline Capital Project CIAC Additions

Schedule G2 – Major Capital Project CIAC Additions

Schedule G3 – CIAC Amortization

Schedule H – Earnings Sharing Calculations<sup>35</sup>

Schedule H1 – Revised Earnings Sharing Calculations 2013

Schedule I – PUC-Ordered Adjustments

---

<sup>35</sup> The Company has provided its calculated ratemaking return on equity for year 2016 in Schedule H as required by the Commission in its *Final Decision and Order* in the decoupling proceeding (Docket No. 2008-0274) on August 31, 2010.

Schedule J – Determination of RAM Cap

Schedule K – Exceptional & Other Matters

Schedule K1 – Exceptional & Other Matters- CIP CT-1 and CIS

The Hawaiian Electric Companies and the Consumer Advocate jointly developed the format of the schedules in Attachment 2, which the Companies have used for their annual RBA Rate Adjustment submissions since 2012.

WHEREFORE, Hawaiian Electric, consistent with the advance notice required by law, hereby respectfully requests that its proposed revisions to the Revenue Balancing Account Provision and Rate Adjustment Mechanism Provision tariffs be allowed to become effective on June 1, 2017.

DATED: Honolulu, Hawai'i, March 31, 2017.

HAWAIIAN ELECTRIC COMPANY, INC.

By:



Joseph P. Viola  
Vice President, Regulatory Affairs



# ATTACHMENT 1

Superseding Revised Sheet No. 50D  
Effective September 21, 2016

REVISED SHEET NO. 50D  
Effective June 1, 2017

RATE SCHEDULES (continued)

<u>Sheet</u>	<u>Schedule</u>	<u>Date Effective</u>	<u>Character of Service</u>
87	TOU-R	September 1, 2012	Residential Time-Of-Use Service
88	TOU-R	September 21, 2016	Residential Time-Of-Use Service
89	Residential TOU EV	September 21, 2016	Residential Time-Of-Use Service with Electric Vehicle Pilot
89A	Residential TOU EV	October 1, 2015	Residential Time-Of-Use Service with Electric Vehicle Pilot
89B	Residential TOU EV	September 21, 2016	Residential Time-Of-Use Service with Electric Vehicle Pilot
92	"RBA"	June 1, 2017	Revenue Balancing Account Provision
92A	"RBA"	January 1, 2014	Revenue Balancing Account Provision
92B	"RBA"	June 1, 2017	Revenue Balancing Account Provision
92C	"RBA"	June 1, 2017	Revenue Balancing Account Provision
92D	"RBA"	June 1, 2017	Revenue Balancing Account Provision
93	"RAM"	June 1, 2013	Rate Adjustment Mechanism Provision
93A	"RAM"	June 1, 2013	Rate Adjustment Mechanism Provision
93B	"RAM"	June 8, 2015	Rate Adjustment Mechanism Provision
93C	"RAM"	June 8, 2015	Rate Adjustment Mechanism Provision
93D	"RAM"	June 1, 2017	Rate Adjustment Mechanism Provision
93E	"RAM"	June 8, 2015	Rate Adjustment Mechanism Provision
93F	"RAM"	June 1, 2013	Rate Adjustment Mechanism Provision
93G	"RAM"	June 8, 2015	Rate Adjustment Mechanism Provision

HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter dated March 31, 2017.

Superseding Sheet No. 50E  
Effective March 1, 2017

REVISED SHEET NO. 50E  
Effective June 1, 2017

RATE SCHEDULES (continued)			
<u>Sheet</u>	<u>Schedule</u>	<u>Date Effective</u>	<u>Character of Service</u>
93H	"RAM"	June 8, 2015	Rate Adjustment Mechanism Provision
93I	"RAM"	June 1, 2017	Rate Adjustment Mechanism Provision
94	"PPAC"	March 1, 2017	Purchased Power Adjustment Clause
94A	"PPAC"	March 1, 2017	Purchased Power Adjustment Clause
94B	"PPAC"	March 1, 2017	Purchased Power Adjustment Clause
95	EV-F	July 4, 2013	Commercial Public Electric Vehicle Charging Facility Service Pilot
95A	EV-F	July 4, 2013	Commercial Public Electric Vehicle Charging Facility Service Pilot
95B	EV-F	July 4, 2013	Commercial Public Electric Vehicle Charging Facility Service Pilot
96	EV-U	July 4, 2013	Commercial Public Electric Vehicle Charging Service Pilot
96A	EV-U	July 4, 2013	Commercial Public Electric Vehicle Charging Service Pilot
97	TOU-RI	November 21, 2016	Residential Interim Time- of-Use Service
97A	TOU-RI	November 21, 2016	Residential Interim Time- of-Use Service
97B	TOU-RI	November 21, 2016	Residential Interim Time- of-Use Service
97C	TOU-RI	November 21, 2016	Residential Interim Time- of-Use Service

HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter dated March 31, 2017.

REVENUE BALANCING ACCOUNT ("RBA") PROVISION

Supplement To:

Schedule R	- Residential Service
Schedule G	- General Service - Non-Demand
Schedule J	- General Service - Demand
Schedule DS	- Large Power Directly Served Service
Schedule P	- Large Power Service
Schedule F	- Public Street Lighting, Highway Lighting and Park and Playground Floodlighting
Schedule U	- Time-of-Use Service
Schedule TOU-R	- Residential Time-of-Use Service
Schedule TOU-G	- Small Commercial Time-of-Use Service
Schedule TOU-J	- Commercial Time-of-Use Service
Schedule SS	- Standby Service
Schedule TOU EV-	Residential Time-of-Use Service with Electric Vehicle Pilot
Schedule EV-F	- Commercial Public Electric Vehicle Charging Facility Service Pilot
Schedule TOU-RI-	Residential Interim Time-of-Use Service

All terms and provisions of the above listed rate schedules applicable except that the total base rate charges for each billing period shall be adjusted by the Revenue Balancing Account Rate Adjustments shown below:

A: PURPOSE:

The purpose of the Revenue Balancing Account ("RBA") is to record: 1) the difference between the Hawaiian Electric Company's target revenue and recorded adjusted revenue, and 2) monthly interest applied to the simple average of the beginning and ending month balances in the RBA. In addition, the recovery provision of this tariff provides for collection or return of the calendar year-end balance in the RBA and recovery or refund of the RAM Revenue Adjustment, Earnings Sharing Revenue Credits, Major Capital Projects Credits, and Baseline Capital Projects Credits provided in the Rate Adjustment Mechanism ("RAM") Provision over the subsequent June 1<sup>st</sup> through May 31<sup>st</sup> period. Tracking of target revenue and recorded adjusted revenue commenced on the effective date of the tariff that implemented the Final Decision and Order in Hawaiian Electric's 2009 test year rate case, Docket No. 2008-0083, consistent with the Final Decision and Order in the Decoupling case, Docket No. 2008-0274.

HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter dated March 31, 2017.

REVENUE BALANCING ACCOUNT ("RBA") PROVISION

B: TARGET REVENUE:

For the purpose of the RBA, the target revenue is the annual electric revenue approved by the Public Utilities Commission in the last issued Decision & Order in the Company's most recent test year general rate case, excluding revenue for fuel and purchased power expenses that are recovered either in base rates or in a purchased power adjustment clause; excluding revenue being separately tracked or recovered through any other surcharge or rate tracking mechanism; and excluding amounts for applicable revenue taxes;

Plus: Any effective RAM Revenue Adjustment calculated under the RAM provision for years subsequent to the most recent rate case test year for which the Commission has issued a Decision & Order; and

Less: Any applicable Earnings Sharing Revenue Credits, Major Capital Projects Credits, and Baseline Capital Projects Credits calculated under the RAM provision.

The target revenue shall be revised to correct for any errors in the calculation of the RAM Revenue Adjustment for any previous period and for revisions to RAM Revenue Adjustments as a result of subsequent Commission orders that change the basis of previously calculated RAM Revenue Adjustments. For any corrections of errors in previously calculated RAM Revenue Adjustments, the target revenue shall be adjusted as of the date that the corrected information would have been reflected in target revenue. For changes in the RAM Revenue Adjustment as a result of subsequently issued Commission orders, the target revenue shall be adjusted as of the effective date of tariff rates that are implemented pursuant to the subsequently issued Commission order.

The Commission and the Consumer Advocate will be notified of the target revenue revisions or corrections prior to implementation by the Company. There is no presumption that the target revenue changes are ultimately warranted or correct. In the subsequent annual March 31 decoupling filing, the utility will have the burden to demonstrate that the interim changes are warranted and correctly applied. The Consumer Advocate will provide comments regarding the changes with its Statement of Position. The RBA balance and RBA Rate Adjustment for the following year will reflect any appropriate modifications to the change made by the utility in the prior year if necessary.

Monthly Allocation Factors for the Target Revenue are as follows:

January	8.10%
February	7.26%
March	8.10%
April	7.84%
May	8.44%
June	8.47%
July	8.77%
August	9.04%
September	8.68%

HAWAIIAN ELECTRIC COMPANY, INC.

Decision and Order No. 31764; Approving, With Modifications, Proposed Revisions To RBA Tariffs, Filed December 27, 2013.  
Transmittal Letter dated December 30, 2013.

REVENUE BALANCING ACCOUNT ("RBA") PROVISION

October	8.78%
November	8.26%
December	8.26%
Total	100.00%

These factors are based on the mWh sales forecast that is approved by the Commission in Hawaiian Electric's 2011 test year rate case and shall be updated in any subsequent test year rate case.

C: BALANCING ACCOUNT ENTRIES:

Entries to the RBA will be recorded monthly. A debit entry to the RBA will be made equal to the target revenue as defined in Section B. above, times the appropriate monthly allocation factor in the table above. A credit entry to the RBA will be made equal to the recorded adjusted revenue. The recorded adjusted revenue is defined to include the electric sales revenue from authorized base rates, plus revenue from any authorized interim rate increase, plus revenue from any RBA rate adjustment, but excluding revenue for fuel and purchased power expenses, IRP/DSM, any Commission Ordered one-time rate refunds or credits or other surcharges, and adjusted to remove amounts for applicable revenue taxes.

Interest will be recorded monthly to the RBA by multiplying the simple average of the beginning and ending month balance in the RBA times the Interest Rate divided by 12. The Interest Rate shall be the short term debt rate as established in deriving the consolidated cost of capital in the Company's last full rate case. The Interest Rate prior to March 1, 2014 shall be 6 percent.

D: RECOVERY OF BALANCING ACCOUNT AMOUNTS:

At the Annual Evaluation Date provided in the Rate Adjustment Mechanism Provision, the Company will file with the Commission a statement of the previous calendar year-end balance in the RBA and the RAM Revenue Adjustment for the current calendar year, along with supporting calculations.

Both an amortization of the previous calendar year-end balance in the RBA, adjusted for any Earnings Sharing Revenue Credits or Major Capital Projects Credits, Baseline Capital Projects Credits or corrections, and the RAM Revenue Adjustment will be recovered through a per-kWh RBA rate adjustment, over the 12 months from June 1 of the

HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter dated March 31, 2017.

REVENUE BALANCING ACCOUNT ("RBA") PROVISION

current calendar year to May 31 of the succeeding calendar year. The recovery through the RBA Rate Adjustment of a RAM Revenue Adjustment calculated for a calendar year that is also a rate case test year shall terminate on the effective date of tariff rates that implement a Commission approved base revenue level authorized in the Company's test year rate case.

Revisions to Target Revenue based on corrections for errors and subsequently issued Commission orders, described in Section B above, will not be reflected in the RBA Rate Adjustment until a succeeding June 1 to May 31 period, unless otherwise ordered or approved by the Commission.

Complete, indexed workpapers and electronic files supporting the previous year-end balance in the RBA shall be provided to the Commission, the Consumer Advocate and all other parties to the Utility's most recent rate case proceeding ("Other Rate Case Parties"), if any, coincident with the Annual Evaluation Date filing. The Company will be prepared to provide information as may be requested to ensure adequate review by the Commission, Consumer Advocate, Other Rate Case Parties, and other interested persons. The Consumer Advocate, Other Rate Case Parties, and other interested persons may propose any adjustments determined to be required to bring the schedules into compliance with the above provisions and will work collaboratively to reach agreement on any proposed adjustments.

As described in Sections 6-61-61 and 6-61-111 of the Hawaii Administrative Rules, Title 6, Chapter 61, based upon the Company's filed schedules and in the absence of any protests submitted by the Consumer Advocate, Other Rate Case Parties, or other interested persons, not later than 15 days before June 1st, the RBA Rate Adjustment shall go into effect on June 1st, and the Commission shall confirm the commencement of the RBA Rate Adjustment in its monthly Tariff Order.

E: REVENUE BALANCING ACCOUNT RATE ADJUSTMENT:

The RBA Rate Adjustment is comprised of the calculated values from Section D above, adjusted to include amounts for applicable revenue taxes, and calculated based on the Company's forecast of mWh sales over the RBA Rate Adjustment recovery period.

The RBA Rate Adjustment shall remain unchanged during the recovery period unless further modification is required by order or approval of the Commission, except as specifically provided above.

RBA Rate Adjustment

All Rate Schedules ..... 2.2291 ¢/kWh

HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter dated March 31, 2017.

REVENUE BALANCING ACCOUNT ("RBA") PROVISION

F. NOTICE

Notice of the annual Revenue Balancing Account Rate Adjustment filing shall be provided to all affected customers of the Utility in accordance with the provisions of this section by publication in newspapers of general circulation within 14 days and by including notification with its billing statements within 60 days after the Company makes its annual filing pursuant to this tariff. The notice to customers shall include the following information:

- a) A description of the proposed revision of revenues, Earnings Sharing Credits, and Major or Baseline Capital Projects Credits;
- b) The effect on the rates applicable to each customer class and on the typical bill for residential customers; and
- c) The Company's address, telephone number and website where information concerning the proposed Revenue Balancing Account Rate Adjustment may be obtained.

G: COMMISSION'S AUTHORITY

The Commission may suspend any or all parts of this Revenue Balancing Account Provision. Such suspension shall remain in place until removed by Commission Order.

HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter dated March 31, 2017.



RATE ADJUSTMENT MECHANISM PROVISION

Rate Adjustment Mechanism ("RAM") Provision

Purpose

This mechanism is subject to review and continuation, termination or modification in the utility's next base rate case proceeding, upon a showing by the utility and finding by the Commission that continuation or modification is appropriate. As part of its submitted testimony in the base rate case, the Company will include a summary report on the status of certain HCEI initiatives. The RAM mechanism is designed to determine the change in annual utility base revenue levels, recognizing certain estimated changes in the utility's cost to provide service. If, through the application of this mechanism, it is determined that annual utility base revenues should be decreased or increased, then the RAM Revenue Adjustment will be applied within the Revenue Balancing Account Provision. The RAM Revenue Adjustment established for a RAM Period calendar year that is also a rate case test year shall terminate on the effective date of tariff rates that are implemented pursuant to a Commission Decision & Order for that test year, unless otherwise specified below.

Definitions

- a) The Annual Evaluation Date shall be the Date the Company will make its annual filing under this mechanism. The Annual Evaluation Date shall be no later than March 31st of each year, commencing March 31, 2011.
- b) The Evaluation Period is defined as the historical twelve month period ending December 31, of each calendar year preceding the Annual Evaluation Date. The Evaluation Period is used solely to determine achieved earnings and any sharing of such earnings above the Authorized Return on Equity.
- c) The RAM Period is defined as the calendar year containing the Annual Evaluation Date.
- d) The Labor Cost Escalation Rate shall be the applicable annual percentage general wage rate increase provided for in currently effective union labor agreements for use in escalating wage and salary Base Expenses for union employees to determine the RAM Revenue Adjustment for each RAM Period. In the event no union labor agreement exists for a RAM Period, the most recently effective annual general percentage increase rate shall apply.

HAWAIIAN ELECTRIC COMPANY, INC.

RATE ADJUSTMENT MECHANISM PROVISION

e) The Non-labor Cost Escalation Rate shall be the consensus estimated annual change in the Gross Domestic Product Price Indicator ("GDPPI") to escalate non-labor Base Expenses to determine the RAM Revenue Adjustment for each RAM Period. The GDPPI escalation rate shall be the consensus projection published by the Blue Chip Economic Indicators (Aspen Publishing) each February for the current RAM Period. In the event that the Blue Chip Economic Indicators forecast of the GDPPI is not available, the Consumer Advocate, Company, and other parties to the most recent rate case, with approval of the Commission, shall jointly select an alternative data source, or national economic index similar to GDPPI, as appropriate.

f) The annual Labor Productivity Offset shall be fixed at 0.76 percent (76/100 of one percent) and will be subtracted from the Labor Cost Escalation Rates applicable to Base Expenses to determine the authorized RAM Revenue Adjustment for each RAM Period.

g) The Base Expenses shall be the labor and non-labor operations and maintenance expense amounts approved by the Commission in the last issued Decision & Order in the Company's most recent test year general rate case. Base Expenses shall not include any fuel, purchased power, IRP/DSM, pension, Other Post-Employment Benefits ("OPEB"), or Clean Energy/Renewable Energy Infrastructure or any costs that are subject to recovery through separate rate tracking mechanisms.

h) The Major Capital Projects shall be those capital investment projects that require an application before and approval by the Commission under the Commission's General Order No. 7, but excluding those projects included in the Clean Energy Infrastructure Surcharge.

i) The Baseline Capital Projects shall be the total amounts of capital investment completed and closed to Plant in Service, excluding amounts related to Major Capital Projects.

j) The Return on Investment shall be the overall weighted percentage rate of return on debt and equity capital approved by the Commission in the last issued Decision & Order in the Company's most recent test year general rate case.

HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter dated May 1, 2013.

RATE ADJUSTMENT MECHANISM PROVISION (continued)

k) The Authorized Return on Equity shall be the percentage rate of return on equity capital approved by the Commission in the last issued Decision & Order in the Company's most recent test year general rate case.

l) The Exogenous Tax Changes shall be the changes in tax laws or regulations that are estimated to impact RBA Target Revenues by two million dollars (\$2,000,000) or more.

m) The Rate Base shall be the average net investment estimated for the RAM Period, including each of the elements of rate base reflected within the most recent rate case Decision & Order issued by the Commission, quantified in the manner prescribed in part (f) of Section 2 of the Rate Adjustment Mechanism.

n) The RAM Revenue Adjustment to be applied to determine effective Target Revenues will be the lesser of a) the RAM Revenue Adjustment Calculation or b) the RAM Revenue Adjustment Cap.

o) The RAM Revenue Adjustment Calculation shall be the change in the annual amount of revenue required for the utility to recover the sum of the O&M RAM Adjustment, Depreciation & Amortization RAM Adjustment, and Rate Base RAM - Return on Investment Adjustment, using the ratemaking conventions and calculations reflected within the most recent rate case Decision & Order issued by the Commission, quantified in the manner prescribed herein.

p) The RAM Revenue Adjustment Cap shall be based on the Target Revenues determined in accordance with the RBA and RAM tariffs as provided below.

q) The RAM Revenue Adjustment determined by this RAM Provision is to be recovered through the RBA Provision commencing on June 1 and over the subsequent 12 months after June 1.

r) Earnings Sharing Revenue Credits shall be the amounts to be returned to customers as credits through the Revenue Balancing Account ("RBA") Provision, so as to implement the earnings sharing percentages and procedures described herein, commencing on June 1 of the calendar year containing the Annual Evaluation Date and over the subsequent 12 months after June 1.

s) Major Capital Projects Credits shall be the amounts to be returned to customers through the Revenue Balancing Account Provision, to reduce a preceding year's RAM Revenue Adjustment (including interest at the rate described in the RBA Provision) for specific major capital projects that were not placed into service within the first nine months of the preceding RAM Period

HAWAIIAN ELECTRIC COMPANY, INC.

RATE ADJUSTMENT MECHANISM PROVISION (continued)

as expected. Because the Commission's review of the Major Capital Projects' actual costs incurred may not occur until the rate case after the RAM Revenue Adjustment for these Major Capital Projects is collected, Major Capital Projects Credits (including interest) will be returned to customers for the amount of Major Capital Projects costs that the Commission disallows for cost recovery. The Major Capital Projects Credits are to be refunded through the RBA Provision, commencing on June 1 of the calendar year containing the Annual Evaluation Date and over the subsequent 12 months after June 1.

t) Baseline Capital Projects Credits shall be the amounts to be returned to customers through the RBA Provision, to reduce a preceding year's RAM Revenue Adjustment (including interest at the rate described in the RBA Provision) for specific baseline capital projects that are disallowed by the Commission in a subsequent rate case if the disallowance reduces actual Baseline Capital Projects costs below the Baseline Capital Projects cost estimate derived using the method identified in part (f)ii. of Section 2 of the Rate Adjustment Mechanism below. Because the Commission's review of baseline capital projects may not occur until the rate case after such baseline capital projects are included in one or more RAM Revenue Adjustment filings, Baseline Capital Projects Credits shall be used to refund to customers any prior collections (i.e., Return on Investment on Rate Base and Depreciation, plus interest) relating to the amount of Baseline Capital Projects costs that the Commission subsequently disallows for cost recovery. The Baseline Capital Projects Credits are to be refunded through the RBA Provision, commencing on June 1 of the calendar year containing the Annual Evaluation Date and over the subsequent 12 months after June 1.

Rate Adjustment Mechanism

The Company shall file with the Commission, the Consumer Advocate and each party to the Company's most recent rate case proceeding, the schedules specified below:

Evaluation Period Earnings Sharing:

1. For the twelve month period ending December 31, of each year (the "Evaluation Period"), with the filing to be made no

HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter dated June 3, 2015.

RATE ADJUSTMENT MECHANISM PROVISION (continued)

later than March 31, of the year following the conclusion of the Evaluation Period. The schedules will include the following:

- a) Company's recorded actual average net plant in service, accumulated deferred income taxes, inventory, working capital, and other rate base components. The schedules shall also show the utility's actual depreciation expense, operating and maintenance expense, income taxes, taxes other than income taxes, and other components of income for return, revenues, and actual capital structure, cost of debt, overall cost of capital, and return on common equity in the format set forth in the final order establishing the Company's latest effective rates.
- b) All applicable accounting and pro forma adjustments historically required in annual reports filed with the Commission.
- c) Pro-forma adjustments to remove from recorded revenues any out-of-period Earnings Sharing Revenue Credits or Major Capital Projects Credits recorded during the Evaluation Period, and
- d) A calculation comparing the achieved return on average common equity to the following earnings sharing grid, and indicating the Earnings Sharing Revenue Credit that should be recorded within the Revenue Balancing Account to effect the prescribed sharing of earnings above authorized levels:

ROE at or below the Authorized ROE	Retained entirely by shareholders - no customer credits
First 100 basis points (one percent) over Authorized ROE	25% share credit to customers
Next 200 basis points (two percent) over Authorized ROE	50% share credit to customers
All ROE exceeding 300 basis points (three percent) over Authorized ROE	90% share credit to customers

HAWAIIAN ELECTRIC COMPANY, INC.

RATE ADJUSTMENT MECHANISM PROVISION (continued)

RAM Period RAM Revenue Adjustment Calculation:

- 2) The Company shall provide additional schedules indicating the following proposed RAM Revenue Adjustment Calculation applicable for the RAM Period using the methodology set forth below:
  - a) The O&M RAM Adjustment shall adjust Base Expenses segregated between labor and non-labor components and treated as follows:
    - i. The labor component shall be quantified for the RAM Period by application of the Labor Cost Escalation Rate, reduced to account for the Productivity Offset to labor expenses, including payroll taxes. The part of Base Expenses that represents labor costs for merit employees shall not be subject to application of the Labor Cost Escalation rate, nor be reduced by the Productivity Offset.
    - ii. The Non-labor components shall be quantified for the RAM Period by application of the Non-labor Escalation Rate to non-labor Base Expenses. Non-labor components shall exclude fuel, purchased power, pension/OPEBs, IRP/DSM or other rate adjustment provisions.
  - b) Depreciation and Amortization RAM Adjustment shall be quantified for the RAM Period by application of Commission-approved accrual rates and methods to the actual recorded Plant in Service balances at the end of the Evaluation Period.
  - c) The Rate Base RAM - Return on Investment Adjustment shall be determined by multiplying the applicable Pretax Rate of Return times the change in Rate Base. The Pretax Rate of Return shall include related income taxes on the equity components of the Return on Investment rate approved by the Commission in the last issued Decision & Order in the Company's most recent test year general rate case. The quantification of Rate Base is specified in greater detail in part (f) of this Section 2.
  - d) The revenue impact of any Exogenous Tax Changes shall be included in the RAM Period calculation of the RAM Revenue Adjustment.
  - e) Revenue taxes shall be adjusted to account for the change in parts (a) through (e) of this Section 2.
  - f) Rate Base for the RAM Period shall be quantified as follows:

HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter dated June 3, 2015.

RATE ADJUSTMENT MECHANISM PROVISION (continued)

- i. Plant in Service, Accumulated Depreciation, Accumulated Deferred Income Taxes and Contributions in Aid of Construction ("CIAC") shall be a two-point average of actual recorded balance sheet data at December 31 of the Evaluation Period, plus projected values at December 31 of the RAM Period determined as prescribed in parts (ii) through (v), below.
- ii. Plant in Service shall be quantified by adding to the recorded balances at December 31 of the Evaluation Period, the simple average of Baseline Capital Projects plant additions recorded in the immediately preceding five calendar years, plus the estimated cost of completed Major Capital Projects that are anticipated to be in service by September 30 of the RAM Period. The cost of Major Capital Projects shall be limited to the dollar amounts previously approved by the Commission, and shall be included at the level of recorded costs if recorded costs are lower than the budget amounts approved by the Commission, and the Commission has not yet reviewed the project costs in a rate case.
- iii. Accumulated Depreciation at December 31 of the RAM Period shall be quantified by increasing the recorded balances at December 31 of the Evaluation Period by the amount set forth in Section 2 part (b) above, consistent with rate-making treatment.
- iv. CIAC shall be quantified by adding to the recorded balance at December 31 of the Evaluation Period an estimate of the net change for the RAM Period. The net change shall be based on a simple average of cash and in-kind CIAC for the immediately preceding five calendar years for programs (i.e., numerous low cost capital projects) plus specific engineering estimates of any contributions for the Major Capital Projects anticipated to be in service by September 30 of the RAM Period.
- v. Accumulated Deferred Income Taxes shall be quantified by adding to the recorded balances at December 31 of the Evaluation Period the estimated tax effect of the depreciation timing difference (i.e., difference between book depreciation and tax depreciation) on the Baseline Capital Projects and Major Capital Projects added to rate base during the RAM Period.
- vi. Working Cash and all other elements of rate base not specifically addressed above shall be fixed at the dollar amount approved by the Commission in the last issued Decision & Order in the Company's most recent test year general rate case. These elements of rate base shall be held constant until revised by a future Commission Decision & Order in a general rate case.

HAWAIIAN ELECTRIC COMPANY, INC.

RATE ADJUSTMENT MECHANISM PROVISION (continued)

g) See also Settlement Agreement section below.

RAM REVENUE ADJUSTMENT CAP

The RAM Basis for the calculation of the RAM Revenue Adjustment Cap shall be the target revenues determined in accordance with the RBA tariff based on the results of the Company's most recent final rate case decision. The RAM Basis shall be adjusted 1) as described below in the determination of the 2014 Rate Base RAM - Return on Investment Adjustment and the 2014 Depreciation and Amortization RAM Adjustment, and 2) to exclude or otherwise appropriately account for adjustments for the recovery of revenues for previously explicitly stipulated and approved exceptional matters or other matters specifically ordered by the Commission, which shall, in any event, be recovered fully without respect to any limitations resulting from application of the RAM Revenue Adjustment Cap.

The RAM Revenue Adjustment Cap shall be calculated as the RAM Basis, multiplied by the cumulative annually compounded increase(s) in the GDPPI for the years between the rate case calendar test year that established the RAM Basis and the RAM Period, adjusted to include applicable revenue taxes.

The RAM Revenue Adjustment Cap will apply to the entire RAM Revenue Adjustment, which includes the O&M RAM Adjustment, Depreciation and Amortization RAM Adjustment, and Rate Base RAM - Return on Investment Adjustment.

Exception to the calculation of the RAM Revenue Adjustment Cap:

For the calculation of the RAM Revenue Adjustment Cap for the 2015 RAM Revenue Adjustment and for each subsequent year's calculation of RAM Revenue Adjustment until the issuance of a final decision and order in the next rate case, the Target Revenues that will serve as the RAM Basis will be the 2014 annualized target revenues adjusted as described below. The 2014 RAM Revenue Adjustment used to determine the adjusted 2014 target revenues will be adjusted to use recorded 2014 end-of-year actuals for plant in service, accumulated depreciation and amortization, CIAC and accumulated deferred income taxes in the determination of the 2014 Rate Base RAM - Return on Investment Adjustment. For the determination of the 2014 Depreciation and Amortization RAM Adjustment, the Company applies the Commission-approved accrual rates and methods to the 2014 end of year balances calculated above. There is no impact to the O&M RAM Adjustment. The RAM Basis shall be adjusted to exclude or otherwise appropriately account for adjustments for the recovery of revenues for previously explicitly stipulated and approved exceptional matters or other matters specifically order by the Commission, as described above.

HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter dated June 3, 2015.



RATE ADJUSTMENT MECHANISM PROVISION (continued)

The RAM Revenue Adjustment Cap for year 2015 and for each subsequent year until the issuance of a final decision and order in the next rate case shall be calculated as the RAM Basis, multiplied by the cumulative annually compounded increase(s) in the GDPPI for the years between 2014 and the RAM Period, adjusted to include applicable revenue taxes.

Evaluation Procedures

Complete, indexed workpapers and electronic files supporting the RAM Adjustment, Earnings Sharing Revenue Credits, and Major and Baseline Capital Projects Credits Schedules shall be provided to the Commission, the Consumer Advocate and all other parties to the Utility's most recent rate case proceeding ("Other Rate Case Parties"), if any, coincident with the Annual Evaluation Date filing. The Company will be prepared to provide information as may be requested to ensure adequate review by the Commission, Consumer Advocate, Other Rate Case Parties, and other interested persons. The Consumer Advocate, Other Rate Case Parties, and other interested persons may propose any adjustments determined to be required to bring the schedules into compliance with the above provisions and will work collaboratively to reach agreement on any proposed adjustments.

The RAM Revenue Adjustment, and any prior year RAM Revenue Adjustments, shall be recalculated for errors in prior calculations and for subsequent Commission orders that change the basis of prior calculations. The effect of such changes to the RAM Revenue Adjustment shall be implemented as described in the Revenue Balancing Account Provision.

As described in Sections 6-61-61 and 6-61-111 of the Hawaii Administrative Rules, Title 6, Chapter 61, based upon the Company's filed schedules and in the absence of any protests submitted by the Consumer Advocate, Other Rate Case Parties, or other interested persons, not later than 15 days before the June 1 effective date of the RBA Rate Adjustment described in the RBA Provision tariff, the RBA Rate Adjustment incorporating the RAM Revenue Adjustment, Earnings Sharing Revenue Credits, and Major and Baseline Capital Projects Credits shall go into effect on the June 1 effective date, and the Commission shall confirm the commencement of the RBA Rate Adjustment in its monthly Tariff Order.

Notice

Notice of the annual Revenue Balancing Account Rate Adjustment filing shall be provided to all affected customers of the Utility in accordance with the provisions of this section by publication in newspapers of general circulation within 14 days and by including notification with its billing statements within 60 days after the Company makes its annual filing pursuant to this tariff. The notice to customers shall include the following information:

HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter dated June 3, 2015.

RATE ADJUSTMENT MECHANISM PROVISION (continued)

- a) A description of the proposed revision of revenues, Earnings Sharing Credits, and Major or Baseline Capital Projects Credits;
- b) The effect on the rates applicable to each customer class and on the typical bill for residential customers; and
- c) The Company's address, telephone number and website where information concerning the proposed Revenue Balancing Account Rate Adjustment may be obtained.

SETTLEMENT AGREEMENT

The provisions in this section are for the sole and limited purpose of implementing the *Stipulated Settlement Agreement between the Hawaiian Electric Companies and the Division of Consumer Advocacy regarding Certain Regulatory Matters*, filed in Docket No. 2008-0083, which the Commission approved in Order No. 31126, issued on March 19, 2013.

The Company will include in the Rate Base RAM - Return on Investment Adjustment and the Depreciation and Amortization RAM Expense Adjustment, in 2013 and subsequent years, the recoverable costs of the Campbell Industrial Park Combustion Turbine Unit 1 ("CIP CT-1") and the Customer Information System ("CIS") projects, net of the Stipulated and Commission approved project cost write-downs and as otherwise provided for in the Stipulated Settlement Agreement. Recovery of the CIS costs through the RAM Revenue Adjustment is for the sole purpose of this settlement agreement and does not constitute a precedent for the recovery of any other software or regulatory asset deferred costs through the RAM Revenue Adjustment.

COMMISSION'S AUTHORITY

The Commission may suspend any or all parts of this Rate Adjustment Mechanism Provision. Such suspension shall remain in place until removed by Commission Order.

HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter dated March 31, 2017.

# ATTACHMENT 1A

Superseding Revised Sheet No. 50D

REVISED SHEET NO. 50D

Effective ~~September 21, 2016~~ ~~June 1, 2016~~

Effective ~~September~~

~~21, 2016~~ June 1, 2017

RATE SCHEDULES (continued)

<u>Sheet</u>	<u>Schedule</u>	<u>Date Effective</u>	<u>Character of Service</u>
87	TOU-R	September 1, 2012	Residential Time-Of-Use Service
88	TOU-R	September 21, 2016	Residential Time-Of-Use Service
89	Residential TOU EV	September 21, 2016	Residential Time-Of-Use Service with Electric Vehicle Pilot
89A	Residential TOU EV	October 1, 2015	Residential Time-Of-Use Service with Electric Vehicle Pilot
89B	Residential TOU EV	September 21, 2016	Residential Time-Of-Use Service with Electric Vehicle Pilot
92	"RBA"	<del>June 1, 2013</del> <u>June 1, 2017</u>	Revenue Balancing Account Provision
92A	"RBA"	January 1, 2014	Revenue Balancing Account Provision
92B	"RBA"	<u>June 1, 2017</u> <del>March 1, 2014</del>	Revenue Balancing Account Provision
92C	"RBA" Balancing Account	<u>June 1, 2017</u> <del>June 1, 2016</del>	Revenue Provision
92D	"RBA" Account	<del>June 1, 2013</del> <u>June 1, 2017</u>	Revenue Balancing Provision
93	"RAM"	June 1, 2013	Rate Adjustment Mechanism Provision
93A	"RAM"	June 1, 2013	Rate Adjustment Mechanism Provision
93B	"RAM"	June 8, 2015	Rate Adjustment Mechanism Provision
93C	"RAM"	June 8, 2015	Rate Adjustment Mechanism Provision
93D	"RAM"	<del>March 1, 2011</del> <u>June 1, 2017</u>	Rate Adjustment Mechanism Provision
93E	"RAM"	June 8, 2015	Rate Adjustment Mechanism Provision

HAWAIIAN ELECTRIC COMPANY, INC.

| Transmittal Letter dated ~~September 21, 2016~~ March 31, 2017.

93F	"RAM"	June 1, 2013	Rate Adjustment Mechanism Provision
93G	"RAM"	June 8, 2015	Rate Adjustment Mechanism Provision

HAWAIIAN ELECTRIC COMPANY, INC.

| Transmittal Letter dated ~~September 21, 2016~~March 31, 2017.

Superseding Sheet No. 50E

REVISED SHEET NO. 50E

Effective March 1, 2017 ~~February 1, 2017~~ Effective ~~March 1, 2017~~ June 1, 2017

RATE SCHEDULES (continued)			
<u>Sheet</u>	<u>Schedule</u>	<u>Date Effective</u>	<u>Character of Service</u>
93H	"RAM"	June 8, 2015	Rate Adjustment Mechanism Provision
93I	"RAM"	<del>June 8, 2015</del> <u>June 1, 2017</u>	Rate Adjustment Mechanism Provision
94	"PPAC"	March 1, 2017	Purchased Power Adjustment Clause
94A	"PPAC"	March 1, 2017	Purchased Power Adjustment Clause
94B	"PPAC"	March 1, 2017	Purchased Power Adjustment Clause
95	EV-F	July 4, 2013	Commercial Public Electric Vehicle Charging Facility Service Pilot
95A	EV-F	July 4, 2013	Commercial Public Electric Vehicle Charging Facility Service Pilot
95B	EV-F	July 4, 2013	Commercial Public Electric Vehicle Charging Facility Service Pilot
96	EV-U	July 4, 2013	Commercial Public Electric Vehicle Charging Service Pilot
96A	EV-U	July 4, 2013	Commercial Public Electric Vehicle Charging Service Pilot
97	TOU-RI	November 21, 2016	Residential Interim Time- of-Use Service
97A	TOU-RI	November 21, 2016	Residential Interim Time- of-Use Service
97B	TOU-RI	November 21, 2016	Residential Interim Time- of-Use Service
97C	TOU-RI	November 21, 2016	Residential Interim Time- of-Use Service

HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter dated ~~February 17, 2017~~ March 31, 2017.

REVENUE BALANCING ACCOUNT ("RBA") PROVISION

Supplement To:

Schedule R	- Residential Service
Schedule G	- General Service - Non-Demand
Schedule J	- General Service - Demand
Schedule DS	- Large Power Directly Served Service
Schedule P	- Large Power Service
Schedule F	- Public Street Lighting, Highway Lighting and Park and Playground Floodlighting
Schedule U	- Time-of-Use Service
Schedule TOU-R	- Residential Time-of-Use Service
Schedule TOU-G	- Small Commercial Time-of-Use Service
Schedule TOU-J	- Commercial Time-of-Use Service
Schedule SS	- Standby Service
Schedule TOU EV-	Residential Time-of-Use Service with Electric Vehicle Pilot
<del>Schedule EV R</del>	<del>Residential Electric Vehicle Charging Service Pilot</del>
<del>Schedule EV C</del>	<del>Commercial Electric Vehicle Charging Service Pilot</del>
<del>Schedule EV-F</del>	<del>Commercial Public Electric Vehicle Charging Facility Service Pilot</del>
<del>Schedule TOU-RI-</del>	<del>Residential Interim Time-of-Use Service</del>

All terms and provisions of the above listed rate schedules applicable except that the total base rate charges for each billing period shall be adjusted by the Revenue Balancing Account Rate Adjustments shown below:

A: PURPOSE:

The purpose of the Revenue Balancing Account ("RBA") is to record: 1) the difference between the Hawaiian Electric Company's target revenue and recorded adjusted revenue, and 2) monthly interest applied to the simple average of the beginning and ending month balances in the RBA. In addition, the recovery provision of this tariff provides for collection or return of the calendar year-end balance in the RBA and recovery or refund of the RAM Revenue Adjustment, Earnings Sharing Revenue Credits, Major Capital Projects Credits, and Baseline Capital Projects Credits provided in the Rate Adjustment Mechanism ("RAM") Provision over the subsequent June 1<sup>st</sup> through May 31<sup>st</sup> period. Tracking of target revenue and recorded adjusted revenue commenced on the effective date of the tariff that implemented the Final Decision  
HAWAIIAN ELECTRIC COMPANY, INC.

REVENUE BALANCING ACCOUNT ("RBA") PROVISION

and Order in Hawaiian Electric's 2009 test year rate case, Docket No. 2008-0083, consistent with the Final Decision and Order in the Decoupling case, Docket No. 2008-0274.

HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter dated March 27, 2012.



REVENUE BALANCING ACCOUNT ("RBA") PROVISION

B: TARGET REVENUE:

For the purpose of the RBA, the target revenue is the annual electric revenue approved by the Public Utilities Commission in the last issued Decision & Order in the Company's most recent test year general rate case, excluding revenue for fuel and purchased power expenses that are recovered either in base rates or in a purchased power adjustment clause; excluding revenue being separately tracked or recovered through any other surcharge or rate tracking mechanism; and excluding amounts for applicable revenue taxes;

Plus: Any effective RAM Revenue Adjustment calculated under the RAM provision for years subsequent to the most recent rate case test year for which the Commission has issued a Decision & Order; and

Less: Any applicable Earnings Sharing Revenue Credits, Major Capital Projects Credits, and Baseline Capital Projects Credits calculated under the RAM provision.

The target revenue shall be revised to correct for any errors in the calculation of the RAM Revenue Adjustment for any previous period and for revisions to RAM Revenue Adjustments as a result of subsequent Commission orders that change the basis of previously calculated RAM Revenue Adjustments. For any corrections of errors in previously calculated RAM Revenue Adjustments, the target revenue shall be adjusted as of the date that the corrected information would have been reflected in target revenue. For changes in the RAM Revenue Adjustment as a result of subsequently issued Commission orders, the target revenue shall be adjusted as of the effective date of tariff rates that are implemented pursuant to the subsequently issued Commission order.

The Commission and the Consumer Advocate will be notified of the target revenue revisions or corrections prior to implementation by the Company. There is no presumption that the target revenue changes are ultimately warranted or correct. In the subsequent annual March 31 decoupling filing, the utility will have the burden to demonstrate that the interim changes are warranted and correctly applied. The Consumer Advocate will provide comments regarding the changes with its Statement of Position. The RBA balance and RBA Rate Adjustment for the following year will reflect any appropriate modifications to the change made by the utility in the prior year if necessary.

Monthly Allocation Factors for the Target Revenue are as follows:

January	8.10%
February	7.26%
March	8.10%
April	7.84%
May	8.44%
June	8.47%
July	8.77%
August	9.04%
September	8.68%

HAWAIIAN ELECTRIC COMPANY, INC.

Decision and Order No. 31764; Approving, With Modifications, Proposed Revisions To RBA Tariffs, Filed December 27, 2013.  
Transmittal Letter dated December 30, 2013.

REVENUE BALANCING ACCOUNT ("RBA") PROVISION

October	8.78%
November	8.26%
December	8.26%
Total	100.00%

These factors are based on the mWh sales forecast that is approved by the Commission in Hawaiian Electric's 2011 test year rate case and shall be updated in any subsequent test year rate case.

C: BALANCING ACCOUNT ENTRIES:

Entries to the RBA will be recorded monthly. A debit entry to the RBA will be made equal to the target revenue as defined in Section B. above, times the appropriate monthly allocation factor in the table above. A credit entry to the RBA will be made equal to the recorded adjusted revenue. The recorded adjusted revenue is defined to include the electric sales revenue from authorized base rates, plus revenue from any authorized interim rate increase, plus revenue from any RBA rate adjustment, but excluding revenue for fuel and purchased power expenses, IRP/DSM, any Commission Ordered one-time rate refunds or credits or other surcharges, and adjusted to remove amounts for applicable revenue taxes.

Interest will be recorded monthly to the RBA by multiplying the simple average of the beginning and ending month balance in the RBA times the Interest Rate divided by 12. The Interest Rate shall be the short term debt rate as established in deriving the consolidated cost of capital in the Company's last full rate case. The Interest Rate prior to March 1, 2014 shall be 6 percent.

~~Entries to the RBA to correct individual billing errors of \$5,000 or greater will be made as soon as possible. Such corrections to the RBA balance shall not require adjustments to prior calculated interest if the corrections are less than \$50,000 (in absolute value, plus or minus). In determining whether the corrections to the RBA balance are less than \$50,000 (in absolute value, plus or minus), all billing errors of \$5,000 or more that result from the same event shall be aggregated.~~

D: RECOVERY OF BALANCING ACCOUNT AMOUNTS:

At the Annual Evaluation Date provided in the Rate Adjustment Mechanism Provision, the Company will file with the Commission a statement of the previous calendar year-end balance in the RBA and the RAM Revenue Adjustment for the current calendar year, along with supporting calculations.

HAWAIIAN ELECTRIC COMPANY, INC.

# REVENUE BALANCING ACCOUNT ("RBA") PROVISION

Both an amortization of the previous calendar year-end balance in the RBA, adjusted for any Earnings Sharing Revenue Credits or Major Capital Projects Credits, Baseline Capital Projects Credits or corrections, and the RAM Revenue Adjustment will be recovered through a per-kWh RBA rate adjustment, over the 12 months from June 1 of the

current calendar year to May 31 of the succeeding calendar year. The recovery through the RBA Rate Adjustment of a RAM Revenue Adjustment calculated for a calendar year that is also a rate case test year shall terminate on the effective date of tariff rates that implement a Commission approved base revenue level authorized in the Company's test year rate case.

Revisions to Target Revenue based on corrections for errors and subsequently issued Commission orders, described in Section B above, will not be reflected in the RBA Rate Adjustment until a succeeding June 1 to May 31 period, unless otherwise ordered or approved by the Commission.

Complete, indexed workpapers and electronic files supporting the previous year-end balance in the RBA shall be provided to the Commission, the Consumer Advocate and all other parties to the Utility's most recent rate case proceeding ("Other Rate Case Parties"), if any, coincident with the Annual Evaluation Date filing. The Company will be prepared to provide information as may be requested to ensure adequate review by the Commission, Consumer Advocate, Other Rate Case Parties, and other interested persons. The Consumer Advocate, Other Rate Case Parties, and other interested persons may propose any adjustments determined to be required to bring the schedules into compliance with the above provisions and will work collaboratively to reach agreement on any proposed adjustments.

As described in Sections 6-61-61 and 6-61-111 of the Hawaii Administrative Rules, Title 6, Chapter 61, based upon the Company's filed schedules and in the absence of any protests submitted by the Consumer Advocate, Other Rate Case Parties, or other interested persons, not later than 15 days before June 1st, the RBA Rate Adjustment shall go into effect on June 1st, and the Commission shall confirm the commencement of the RBA Rate Adjustment in its monthly Tariff Order.

## E: REVENUE BALANCING ACCOUNT RATE ADJUSTMENT:

The RBA Rate Adjustment is comprised of the calculated values from Section D above, adjusted to include amounts for applicable revenue taxes, and calculated based on the Company's forecast of mWh sales over the RBA Rate Adjustment recovery period.

HAWAIIAN ELECTRIC COMPANY, INC.

Superseding REVISED SHEET NO. 92C  
Effective June 1, 2016~~June 8, 2015~~  
~~2016~~2017

REVISED SHEET NO. 92C  
Effective June 1,

# REVENUE BALANCING ACCOUNT ("RBA") PROVISION

The RBA Rate Adjustment shall remain unchanged during the recovery period unless further modification is required by order or approval of the Commission, except as specifically provided above.

## RBA Rate Adjustment

| All Rate Schedules ..... ~~2.1098~~2.2291 ¢/kWh

| ~~F. NOTICE~~

HAWAIIAN ELECTRIC COMPANY, INC.

| Transmittal Letter dated March 31, ~~2016~~2017.

REVENUE BALANCING ACCOUNT ("RBA") PROVISION

F. NOTICE

Notice of the annual Revenue Balancing Account Rate Adjustment filing shall be provided to all affected customers of the Utility in accordance with the provisions of this section by publication in newspapers of general circulation within 14 days and by including notification with its billing statements within 60 days after the Company makes its annual filing pursuant to this tariff. The notice to customers shall include the following information:

- a) A description of the proposed revision of revenues, Earnings Sharing Credits, and Major or Baseline Capital Projects Credits;
- b) The effect on the rates applicable to each customer class and on the typical bill for residential customers; and
- c) The Company's address, telephone number and website where information concerning the proposed Revenue Balancing Account Rate Adjustment may be obtained.

G. SETTLEMENT AGREEMENT

~~The provisions in this section are a part of the Stipulated Settlement Agreement between the Hawaiian Electric Companies and the Division of Consumer Advocacy regarding Certain Regulatory Matters, filed in Docket No. 2008-0083, which the Commission approved in Order No. 31126, issued on March 19, 2013.~~

~~For only the 2014, 2015, and 2016 RAM Periods, Hawaiian Electric will be allowed to accrue the 2014, 2015, and 2016 RAM Revenue Adjustments, effective January 1 through December 31 of the calendar year. Once the Company is able to calculate the RAM amount, the Company will record RAM Revenue Adjustment revenue for the monthly accruals. Recording of the accruals for those years will be delayed until the Company is able to determine the RAM amount. The Company is allowed to collect the ratably accrued RAM Revenue Adjustment amounts that are recorded from January through December, based on the monthly allocation factors specified above, through the RBA Rate Adjustment in years 2014, 2015, and 2016 from June 1 of each year to May 31 of the following year.~~

~~When the Company implements a Commission Decision & Order for a rate case for a 2014, 2015, or 2016 test year, further accrual of the RAM Revenue Adjustment for that test year, if still in progress, shall terminate. The Company will adjust the RBA Rate Adjustment to collect the unrecovered accrued RAM Revenue Adjustment amount for that year.~~

HG: COMMISSION'S AUTHORITY

HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter dated May 1, 2013 March 31, 2017.

Superseding SHEET NO. 92C  
Effective March 28, 2012

REVISED SHEET NO. 92C  
Effective June 1, 2013

REVENUE BALANCING ACCOUNT ("RBA") PROVISION

The Commission may suspend any or all parts of this Revenue Balancing Account Provision. Such suspension shall remain in place until removed by Commission Order.

HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter dated May 1, 2013.

## RATE ADJUSTMENT MECHANISM PROVISION

### Rate Adjustment Mechanism ("RAM") Provision

#### Purpose

This mechanism is subject to review and continuation, termination or modification in the utility's next base rate case proceeding, upon a showing by the utility and finding by the Commission that continuation or modification is appropriate. As part of its submitted testimony in the base rate case, the Company will include a summary report on the status of certain HCEI initiatives. The RAM mechanism is designed to determine the change in annual utility base revenue levels, recognizing certain estimated changes in the utility's cost to provide service. If, through the application of this mechanism, it is determined that annual utility base revenues should be decreased or increased, then the RAM Revenue Adjustment will be applied within the Revenue Balancing Account Provision. The RAM Revenue Adjustment established for a RAM Period calendar year that is also a rate case test year shall terminate on the effective date of tariff rates that are implemented pursuant to a Commission Decision & Order for that test year, unless otherwise specified below.

#### Definitions

- a) The Annual Evaluation Date shall be the Date the Company will make its annual filing under this mechanism. The Annual Evaluation Date shall be no later than March 31st of each year, commencing March 31, 2011.
- b) The Evaluation Period is defined as the historical twelve month period ending December 31, of each calendar year preceding the Annual Evaluation Date. The Evaluation Period is used solely to determine achieved earnings and any sharing of such earnings above the Authorized Return on Equity.
- c) The RAM Period is defined as the calendar year containing the Annual Evaluation Date.
- d) The Labor Cost Escalation Rate shall be the applicable annual percentage general wage rate increase provided for in currently effective union labor agreements for use in escalating wage and salary Base Expenses for union employees to determine the RAM Revenue Adjustment for each RAM Period. In the event no union labor agreement exists for a RAM Period, the most recently effective annual general percentage increase rate shall apply.

HAWAIIAN ELECTRIC COMPANY, INC.

RATE ADJUSTMENT MECHANISM PROVISION

- e) The Non-labor Cost Escalation Rate shall be the consensus estimated annual change in the Gross Domestic Product Price Indicator ("GDPPI") to escalate non-labor Base Expenses to determine the RAM Revenue Adjustment for each RAM Period. The GDPPI escalation rate shall be the consensus projection published by the Blue Chip Economic Indicators (Aspen Publishing) each February for the current RAM Period. In the event that the Blue Chip Economic Indicators forecast of the GDPPI is not available, the Consumer Advocate, Company, and other parties to the most recent rate case, with approval of the Commission, shall jointly select an alternative data source, or national economic index similar to GDPPI, as appropriate.
- f) The annual Labor Productivity Offset shall be fixed at 0.76 percent (76/100 of one percent) and will be subtracted from the Labor Cost Escalation Rates applicable to Base Expenses to determine the authorized RAM Revenue Adjustment for each RAM Period.
- g) The Base Expenses shall be the labor and non-labor operations and maintenance expense amounts approved by the Commission in the last issued Decision & Order in the Company's most recent test year general rate case. Base Expenses shall not include any fuel, purchased power, IRP/DSM, pension, Other Post-Employment Benefits ("OPEB"), or Clean Energy/Renewable Energy Infrastructure or any costs that are subject to recovery through separate rate tracking mechanisms.
- h) The Major Capital Projects shall be those capital investment projects that require an application before and approval by the Commission under the Commission's General Order No. 7, but excluding those projects included in the Clean Energy Infrastructure Surcharge.
- i) The Baseline Capital Projects shall be the total amounts of capital investment completed and closed to Plant in Service, excluding amounts related to Major Capital Projects.
- j) The Return on Investment shall be the overall weighted percentage rate of return on debt and equity capital approved by the Commission in the last issued Decision & Order in the Company's most recent test year general rate case.

HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter dated May 1, 2013.



RATE ADJUSTMENT MECHANISM PROVISION (continued)

k) The Authorized Return on Equity shall be the percentage rate of return on equity capital approved by the Commission in the last issued Decision & Order in the Company's most recent test year general rate case.

l) The Exogenous Tax Changes shall be the changes in tax laws or regulations that are estimated to impact RBA Target Revenues by two million dollars (\$2,000,000) or more.

m) The Rate Base shall be the average net investment estimated for the RAM Period, including each of the elements of rate base reflected within the most recent rate case Decision & Order issued by the Commission, quantified in the manner prescribed in part (f) of Section 2 of the Rate Adjustment Mechanism.

n) The RAM Revenue Adjustment to be applied to determine effective Target Revenues will be the lesser of a) the RAM Revenue Adjustment Calculation or b) the RAM Revenue Adjustment Cap.

o) The RAM Revenue Adjustment Calculation shall be the change in the annual amount of revenue required for the utility to recover the sum of the O&M RAM Adjustment, Depreciation & Amortization RAM Adjustment, and Rate Base RAM - Return on Investment Adjustment, using the ratemaking conventions and calculations reflected within the most recent rate case Decision & Order issued by the Commission, quantified in the manner prescribed herein.

p) The RAM Revenue Adjustment Cap shall be based on the Target Revenues determined in accordance with the RBA and RAM tariffs as provided below.

q) The RAM Revenue Adjustment determined by this RAM Provision is to be recovered through the RBA Provision commencing on June 1 and over the subsequent 12 months after June 1.

r) Earnings Sharing Revenue Credits shall be the amounts to be returned to customers as credits through the Revenue Balancing Account ("RBA") Provision, so as to implement the earnings sharing percentages and procedures described herein, commencing on June 1 of the calendar year containing the Annual Evaluation Date and over the subsequent 12 months after June 1.

s) Major Capital Projects Credits shall be the amounts to be returned to customers through the Revenue Balancing Account Provision, to reduce a preceding year's RAM Revenue Adjustment (including interest at the rate described in the RBA Provision) for specific major capital projects that were not placed into service within the first nine months of the preceding RAM Period

HAWAIIAN ELECTRIC COMPANY, INC.

RATE ADJUSTMENT MECHANISM PROVISION (continued)

as expected. Because the Commission's review of the Major Capital Projects' actual costs incurred may not occur until the rate case after the RAM Revenue Adjustment for these Major Capital Projects is collected, Major Capital Projects Credits (including interest) will be returned to customers for the amount of Major Capital Projects costs that the Commission disallows for cost recovery. The Major Capital Projects Credits are to be refunded through the RBA Provision, commencing on June 1 of the calendar year containing the Annual Evaluation Date and over the subsequent 12 months after June 1.

t) Baseline Capital Projects Credits shall be the amounts to be returned to customers through the RBA Provision, to reduce a preceding year's RAM Revenue Adjustment (including interest at the rate described in the RBA Provision) for specific baseline capital projects that are disallowed by the Commission in a subsequent rate case if the disallowance reduces actual Baseline Capital Projects costs below the Baseline Capital Projects cost estimate derived using the method identified in part (f)ii. of Section 2 of the Rate Adjustment Mechanism below. Because the Commission's review of baseline capital projects may not occur until the rate case after such baseline capital projects are included in one or more RAM Revenue Adjustment filings, Baseline Capital Projects Credits shall be used to refund to customers any prior collections (i.e., Return on Investment on Rate Base and Depreciation, plus interest) relating to the amount of Baseline Capital Projects costs that the Commission subsequently disallows for cost recovery. The Baseline Capital Projects Credits are to be refunded through the RBA Provision, commencing on June 1 of the calendar year containing the Annual Evaluation Date and over the subsequent 12 months after June 1.

Rate Adjustment Mechanism

The Company shall file with the Commission, the Consumer Advocate and each party to the Company's most recent rate case proceeding, the schedules specified below:

Evaluation Period Earnings Sharing:

1. For the twelve month period ending December 31, of each year (the "Evaluation Period"), with the filing to be made no

HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter dated June 3, 2015.

Superseding SHEET NO. 93D  
Effective March 1, 2011  
2011June 1, 2017

REVISED SHEET NO. 93D  
Effective March 1,

RATE ADJUSTMENT MECHANISM PROVISION (continued)

later than March 31, of the year following the conclusion of the Evaluation Period. The schedules will include the following:

- a) Company's recorded actual average net plant in service, accumulated deferred income taxes, inventory, working capital, and other rate base components. The schedules shall also show the utility's actual depreciation expense, operating and maintenance expense, income taxes, taxes other than income taxes, and other components of income for return, revenues, and actual capital structure, cost of debt, overall cost of capital, and return on common equity in the format set forth in the final order establishing the Company's latest effective rates.
- b) All applicable accounting and pro forma adjustments historically required in annual reports filed with the Commission.
- c) Pro-forma adjustments to remove from recorded revenues any out-of-period Earnings Sharing Revenue Credits or Major Capital Projects Credits recorded during the Evaluation Period, and
- d) A calculation comparing the achieved return on average common equity to the following earnings sharing grid, and indicating the Earnings Sharing Revenue Credit that should be recorded within the Revenue Balancing Account to effect the prescribed sharing of earnings above authorized levels:

HAWAIIAN ELECTRIC COMPANY, INC.

Docket No. 2008-0033, Final Decision and Order, December 29,  
2010.  
Transmittal Letter dated January 24, 2011March 31, 2017.

Superseding SHEET NO. 93D  
Effective March 1, 2011  
~~2011~~June 1, 2017

REVISED SHEET NO. 93D  
Effective March 1,

RATE ADJUSTMENT MECHANISM PROVISION (continued)

ROE at or below the Authorized ROE	Retained entirely by shareholders - no customer credits
First 100 basis points (one percent) over Authorized ROE	25% share credit to customers
Next 200 basis points (two percent) over Authorized ROE	50% share credit to customers
All ROE exceeding 300 basis points (three percent) over Authorized ROE	90% share credit to customers

HAWAIIAN ELECTRIC COMPANY, INC.

Docket No. 2008-0083, Final Decision and Order, December 29,  
2010.  
Transmittal Letter dated January 24, 2011March 31, 2017.

RATE ADJUSTMENT MECHANISM PROVISION (continued)  
RAM Period RAM Revenue Adjustment Calculation:

- 2) The Company shall provide additional schedules indicating the following proposed RAM Revenue Adjustment Calculation applicable for the RAM Period using the methodology set forth below:
  - a) The O&M RAM Adjustment shall adjust Base Expenses segregated between labor and non-labor components and treated as follows:
    - i. The labor component shall be quantified for the RAM Period by application of the Labor Cost Escalation Rate, reduced to account for the Productivity Offset to labor expenses, including payroll taxes. The part of Base Expenses that represents labor costs for merit employees shall not be subject to application of the Labor Cost Escalation rate, nor be reduced by the Productivity Offset.
    - ii. The Non-labor components shall be quantified for the RAM Period by application of the Non-labor Escalation Rate to non-labor Base Expenses. Non-labor components shall exclude fuel, purchased power, pension/OPEBs, IRP/DSM or other rate adjustment provisions.
  - b) Depreciation and Amortization RAM Adjustment shall be quantified for the RAM Period by application of Commission-approved accrual rates and methods to the actual recorded Plant in Service balances at the end of the Evaluation Period.
  - c) The Rate Base RAM - Return on Investment Adjustment shall be determined by multiplying the applicable Pretax Rate of Return times the change in Rate Base. The Pretax Rate of Return shall include related income taxes on the equity components of the Return on Investment rate approved by the Commission in the last issued Decision & Order in the Company's most recent test year general rate case. The quantification of Rate Base is specified in greater detail in part (f) of this Section 2.
  - d) The revenue impact of any Exogenous Tax Changes shall be included in the RAM Period calculation of the RAM Revenue Adjustment.
  - e) Revenue taxes shall be adjusted to account for the change in parts (a) through (e) of this Section 2.
  - f) Rate Base for the RAM Period shall be quantified as follows:

HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter dated June 3, 2015.

RATE ADJUSTMENT MECHANISM PROVISION (continued)

- i. Plant in Service, Accumulated Depreciation, Accumulated Deferred Income Taxes and Contributions in Aid of Construction ("CIAC") shall be a two-point average of actual recorded balance sheet data at December 31 of the Evaluation Period, plus projected values at December 31 of the RAM Period determined as prescribed in parts (ii) through (v), below.
- ii. Plant in Service shall be quantified by adding to the recorded balances at December 31 of the Evaluation Period, the simple average of Baseline Capital Projects plant additions recorded in the immediately preceding five calendar years, plus the estimated cost of completed Major Capital Projects that are anticipated to be in service by September 30 of the RAM Period. The cost of Major Capital Projects shall be limited to the dollar amounts previously approved by the Commission, and shall be included at the level of recorded costs if recorded costs are lower than the budget amounts approved by the Commission, and the Commission has not yet reviewed the project costs in a rate case.
- iii. Accumulated Depreciation at December 31 of the RAM Period shall be quantified by increasing the recorded balances at December 31 of the Evaluation Period by the amount set forth in Section 2 part (b) above, consistent with rate-making treatment.
- iv. CIAC shall be quantified by adding to the recorded balance at December 31 of the Evaluation Period an estimate of the net change for the RAM Period. The net change shall be based on a simple average of cash and in-kind CIAC for the immediately preceding five calendar years for programs (i.e., numerous low cost capital projects) plus specific engineering estimates of any contributions for the Major Capital Projects anticipated to be in service by September 30 of the RAM Period.
- v. Accumulated Deferred Income Taxes shall be quantified by adding to the recorded balances at December 31 of the Evaluation Period the estimated tax effect of the depreciation timing difference (i.e., difference between book depreciation and tax depreciation) on the Baseline Capital Projects and Major Capital Projects added to rate base during the RAM Period.
- vi. Working Cash and all other elements of rate base not specifically addressed above shall be fixed at the dollar amount approved by the Commission in the last issued Decision & Order in the Company's most recent test year general rate case. These elements of rate base shall be held constant until revised by a future Commission Decision & Order in a general rate case.

HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter dated May 1, 2013.

RATE ADJUSTMENT MECHANISM PROVISION (continued)

g) See also Settlement Agreement section below.

RAM REVENUE ADJUSTMENT CAP

The RAM Basis for the calculation of the RAM Revenue Adjustment Cap shall be the target revenues determined in accordance with the RBA tariff based on the results of the Company's most recent final rate case decision. The RAM Basis shall be adjusted 1) as described below in the determination of the 2014 Rate Base RAM - Return on Investment Adjustment and the 2014 Depreciation and Amortization RAM Adjustment, and 2) to exclude or otherwise appropriately account for adjustments for the recovery of revenues for previously explicitly stipulated and approved exceptional matters or other matters specifically ordered by the Commission, which shall, in any event, be recovered fully without respect to any limitations resulting from application of the RAM Revenue Adjustment Cap.

The RAM Revenue Adjustment Cap shall be calculated as the RAM Basis, multiplied by the cumulative annually compounded increase(s) in the GDPPI for the years between the rate case calendar test year that established the RAM Basis and the RAM Period, adjusted to include applicable revenue taxes.

The RAM Revenue Adjustment Cap will apply to the entire RAM Revenue Adjustment, which includes the O&M RAM Adjustment, Depreciation and Amortization RAM Adjustment, and Rate Base RAM - Return on Investment Adjustment.

Exception to the calculation of the RAM Revenue Adjustment Cap:

For the calculation of the RAM Revenue Adjustment Cap for the 2015 RAM Revenue Adjustment and for each subsequent year's calculation of RAM Revenue Adjustment until the issuance of a final decision and order in the next rate case, the Target Revenues that will serve as the RAM Basis will be the 2014 annualized target revenues adjusted as described below. The 2014 RAM Revenue Adjustment used to determine the adjusted 2014 target revenues will be adjusted to use recorded 2014 end-of-year actuals for plant in service, accumulated depreciation and amortization, CIAC and accumulated deferred income taxes in the determination of the 2014 Rate Base RAM - Return on Investment Adjustment. For the determination of the 2014 Depreciation and Amortization RAM Adjustment, the Company applies the Commission-approved accrual rates and methods to the 2014 end of year balances calculated above. There is no impact to the O&M RAM Adjustment. The RAM Basis shall be adjusted to exclude or otherwise appropriately account for adjustments for the recovery of revenues for previously explicitly stipulated and approved exceptional matters or other matters specifically order by the Commission, as described above.

HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter dated June 3, 2015.

RATE ADJUSTMENT MECHANISM PROVISION (continued)

The RAM Revenue Adjustment Cap for year 2015 and for each subsequent year until the issuance of a final decision and order in the next rate case shall be calculated as the RAM Basis, multiplied by the cumulative annually compounded increase(s) in the GDPPI for the years between 2014 and the RAM Period, adjusted to include applicable revenue taxes.

Evaluation Procedures

Complete, indexed workpapers and electronic files supporting the RAM Adjustment, Earnings Sharing Revenue Credits, and Major and Baseline Capital Projects Credits Schedules shall be provided to the Commission, the Consumer Advocate and all other parties to the Utility's most recent rate case proceeding ("Other Rate Case Parties"), if any, coincident with the Annual Evaluation Date filing. The Company will be prepared to provide information as may be requested to ensure adequate review by the Commission, Consumer Advocate, Other Rate Case Parties, and other interested persons. The Consumer Advocate, Other Rate Case Parties, and other interested persons may propose any adjustments determined to be required to bring the schedules into compliance with the above provisions and will work collaboratively to reach agreement on any proposed adjustments.

The RAM Revenue Adjustment, and any prior year RAM Revenue Adjustments, shall be recalculated for errors in prior calculations and for subsequent Commission orders that change the basis of prior calculations. The effect of such changes to the RAM Revenue Adjustment shall be implemented as described in the Revenue Balancing Account Provision.

As described in Sections 6-61-61 and 6-61-111 of the Hawaii Administrative Rules, Title 6, Chapter 61, based upon the Company's filed schedules and in the absence of any protests submitted by the Consumer Advocate, Other Rate Case Parties, or other interested persons, not later than 15 days before the June 1 effective date of the RBA Rate Adjustment described in the RBA Provision tariff, the RBA Rate Adjustment incorporating the RAM Revenue Adjustment, Earnings Sharing Revenue Credits, and Major and Baseline Capital Projects Credits shall go into effect on the June 1 effective date, and the Commission shall confirm the commencement of the RBA Rate Adjustment in its monthly Tariff Order.

Notice

Notice of the annual Revenue Balancing Account Rate Adjustment filing shall be provided to all affected customers of the Utility in accordance with the provisions of this section by publication in newspapers of general circulation within 14 days and by including notification with its billing statements within 60 days after the Company makes its annual filing pursuant to this tariff. The notice to customers shall include the following information:

HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter dated June 3, 2015.



Superseding SHEET NO. 93I  
Effective June 8, 2015  
~~2015~~June 1, 2017

SHEET NO. 93I  
Effective ~~June 8,~~

RATE ADJUSTMENT MECHANISM PROVISION (continued)

- a) A description of the proposed revision of revenues, Earnings Sharing Credits, and Major or Baseline Capital Projects Credits;
- b) The effect on the rates applicable to each customer class and on the typical bill for residential customers; and
- c) The Company's address, telephone number and website where information concerning the proposed Revenue Balancing Account Rate Adjustment may be obtained.

SETTLEMENT AGREEMENT

The provisions in this section are for the sole and limited purpose of implementing the *Stipulated Settlement Agreement between the Hawaiian Electric Companies and the Division of Consumer Advocacy regarding Certain Regulatory Matters*, filed in Docket No. 2008-0083, which the Commission approved in Order No. 31126, issued on March 19, 2013.

The Company will include in the Rate Base RAM - Return on Investment Adjustment and the Depreciation and Amortization RAM Expense Adjustment, in 2013 and subsequent years, the recoverable costs of the Campbell Industrial Park Combustion Turbine Unit 1 ("CIP CT-1") and the Customer Information System ("CIS") projects, net of the Stipulated and Commission approved project cost write-downs and as otherwise provided for in the Stipulated Settlement Agreement. Recovery of the CIS costs through the RAM Revenue Adjustment is for the sole purpose of this settlement agreement and does not constitute a precedent for the recovery of any other software or regulatory asset deferred costs through the RAM Revenue Adjustment.

~~In accordance with the Stipulated Settlement Agreement and for only the 2014, 2015, and 2016 RAM Periods, Hawaiian Electric will be allowed to record the 2014, 2015, and 2016 RAM Revenue Adjustments, effective January 1 through December 31 of the calendar year (once the Company is able to determine the amount). The Company shall be allowed to collect the accrued RAM Revenue Adjustment amounts, pursuant to this provision, through the RBA Rate Adjustment from June 1 of each year to May 31 of the following year.~~

~~When the Company implements a Commission Decision & Order for any rate case test year within 2014, 2015, or 2016, the accrual of RAM Revenue Adjustment amounts for that test year, if still in progress, shall terminate. The Company will adjust the RBA Rate Adjustment to collect any accrued but unrecovered RAM Revenue Adjustment amounts for that year.~~

COMMISSION'S AUTHORITY

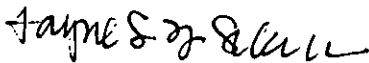
The Commission may suspend any or all parts of this Rate Adjustment Mechanism Provision. Such suspension shall remain in place until removed by Commission Order.

HAWAIIAN ELECTRIC COMPANY, INC.

Transmittal Letter dated ~~June 3, 2015~~March 31, 2017.

## ATTESTATION

Tayne S. Y. Sekimura, is the Senior Vice President & Chief Financial Officer of Hawaiian Electric Company, Inc., and says that she certifies that the attached Schedules supporting the proposed changes in customer rates pursuant to the Revenue Balancing Account (“RBA”) Provision have been prepared in compliance with the Rate Adjustment Mechanism Provision and the RBA Provision, and prior Commission rate orders are true, correct and complete to the best of her knowledge and belief.

  
\_\_\_\_\_  
Tayne S. Y. Sekimura

Attachment 2 – List of Schedules and Workpapers

Schedule A	HECO-WP-A-001
Schedule A 1	HECO-WP-A1-001
Schedule B	HECO-WP-A1-002
Schedule B1	HECO-WP-B-001
Schedule B2	HECO-WP-B-002
Schedule C	HECO-WP-B-003
Schedule C1	HECO-WP-B-004
Schedule C2	HECO-WP-B-005
Schedule D	HECO-WP-B-006
Schedule D1	HECO-WP-B-007
Schedule D2	HECO-WP-B-008
Schedule D3	HECO-WP-B-009
Schedule D4	HECO-WP-B-010
Schedule E	HECO-WP-B-011
Schedule F	HECO-WP-B-012
Schedule F1	HECO-WP-B-013
Schedule F2	HECO-WP-B-014
Schedule G	HECO-WP-B-015
Schedule G1	HECO-WP-B-016
Schedule G2	HECO-WP-B-017
Schedule G3	HECO-WP-C-001
Schedule H	HECO-WP-C-002
Schedule H1	HECO-WP-C-003
Schedule I	HECO-WP-D1-001A
Schedule J	HECO-WP-D1-001B
Schedule K	HECO-WP-D2-001
Schedule K 1	HECO-WP-D2-002
	HECO-WP-D3-001
	HECO-WP-D4-001
	HECO-WP-D4-002
	HECO-WP-D4-003
	HECO-WP-D4-004
	HECO-WP-E-001
	HECO-WP-F-001
	HECO-WP-F1-001
	HECO-WP-F1-002
	HECO-WP-G2-001
	HECO-WP-H-001
	HECO-WP-H-002
	HECO-WP-H-003
	HECO-WP-H-004
	HECO-WP-H-005
	HECO-WP-H-006
	HECO-WP-H-007
	HECO-WP-H-008
	HECO-WP-K-001
	HECO-WP-K-002

**HAWAIIAN ELECTRIC COMPANY, INC.**  
**DECOUPLING CALCULATION WORKBOOK**  
**DETERMINATION OF 2017 REVENUE BALANCING ACCOUNT RATE ADJUSTMENT**

Line No.	Description (a)	Reference (b)	Amount (c)	Rate Amount (d)
<b>RECONCILIATION OF RBA BALANCE:</b>				
1	RBA Prior calendar year-end balance	Schedule B	\$ 43,227,612	
2	Revenue Tax Factor	Schedule C	1.0975	
3	Revenue for RBA Balance			\$ 47,442,304
<b>RATE ADJUSTMENT MECHANISM "RAM" AMOUNT:</b>				
4	Total RAM Revenue Adjustment Allowed (Note 2)	Schedule A1		\$ 101,131,452
5	<u>EARNINGS SHARING REVENUE CREDITS - 2017 ROE:</u>	Schedule H		\$ -
5a	ESM Adjustment - 2012 (Note 3)	Schedule H1		\$ (15,526)
6	<u>PUC-ORDERED MAJOR OR BASELINE CAPITAL PROJECTS CREDITS:</u>	Schedule I		\$ -
7	TOTAL RBA REVENUE ADJUSTMENT	Sum Col. (d)		\$ 148,558,229
8	GWH SALES VOLUME ESTIMATE JUNE 2017 - MAY 2018	HECO-WP-A-001		6,664,400
9	RBA RATE ADJUSTMENT - cents per kWh	Note (1)		2.2291
10	MONTHLY BILL IMPACT @ 600 KWH			\$ 13.37
	MONTHLY BILL IMPACT @ 500 KWH			\$ 11.15

Note (1): 2017 RBA Rate Adjustment Breakdown

	Col. (d)	Rate Adjustment cents per kWh	Percentage Share
RBA Balance	\$ 47,442,304	0.71187660	31.9352%
RAM Amount	\$ 101,131,452	1.51748772	68.0753%
Earnings Sharing Revenue Credits	\$ (15,526)	-0.00023297	-0.0105%
Major or Baseline Capital Projects Credits	\$ -	0.00000000	0.0000%
	\$ 148,558,229	2.22913135	100.0000%

Note (2): Total RAM Revenue Adjustment Allowed is the sum of the RAM Cap + Exceptional and Other Projects. See Order No. 32735, filed March 31, 2015, paragraph 107, page 94, which states that the Total RAM Revenue Adjustment is to be comprised of the RAM Cap plus recovery of Exceptional And Other Matters.

Note (3): The adjustment on line 5a represents additional refunds plus interest for the period June 2013 through May 2017. In July 2016, the Companies discovered the interest expense accrued for financial statement purposes had erroneously been overstated since May 2012 due to the incorrect programming of a report developed when the Customer Information System was implemented. The report miscalculated accrued interest on released deposits and for deposits that had been transferred to the new Customer Information System. The misstatement was deemed immaterial and no prior period adjustment was warranted for financial reporting purposes. However, it resulted in an understatement of the Earnings Sharing Mechanism in the 2013 Annual decoupling filing when the ESM was triggered. See Schedule H1 for the recalculation of the Earnings Sharing Mechanism in that year.

**HAWAIIAN ELECTRIC COMPANY, INC.**  
**DECOUPLING CALCULATION WORKBOOK**  
**DETERMINATION OF TOTAL RAM REVENUE ADJUSTMENT ALLOWED**

Line No.	Description (a)	Reference	Amount
<b>RAM REVENUE ADJUSTMENT DETERMINED ACCORDING TO EXISTING TARIFFS AND PROCEDURES</b>			
1	O&M RAM	Schedule C	\$ 23,380,733
2	Rate Base RAM - Return on Investment	Schedule D	\$ 66,238,985
3	Depreciation & Amortization RAM Expense	Schedule E	\$ 47,364,714
4	Total RAM Revenue Adjustment		\$ 136,984,432
5	Less: Adjustment for Change in On-cost Clearing Allocation	Note 3	\$ (8,821,951)
6	Total Adjusted RAM Revenue Adjustment		<b>\$ 128,162,481</b>
<b>RAM REVENUE ADJUSTMENT CAP</b>			
7	RAM Cap for 2017 RAM Revenue Adjustment	Schedule J	\$ 97,742,487
8	Plus: Exceptional and Other Matters	Schedule K	\$ 3,388,964
9	2017 Cap - Total RAM Revenue Adjustment (Note 2)		<b>\$ 101,131,452</b>
10	Total RAM Revenue Adjustment Allowed (Note 1)	Lesser of Line 6 or Line 9	<b>\$ 101,131,452</b>
			To Sch A

- Note 1 RAM Revenue Adjustment Allowed:  
See Order No. 32735, filed March 31, 2015, paragraph 106, page 94:  
"The RAM Revenue Adjustment to be applied to determine effective Target Revenues will be the lesser of (a) the RAM Revenue Adjustment determined according to existing tariffs and procedures or (b) a RAM Revenue Adjustment Cap ("RAM Cap) to be calculated as specified."
- Note 2 Total RAM Cap:  
See Order No. 32735, filed March 31, 2015, paragraph 110, page 96:  
"The RAM Cap will apply to the entire RAM Revenue Adjustment including the O&M RAM, Rate Base RAM (including Major Capital Projects and Baseline Projects), and the Depreciation and Amortization RAM."
- Note 3 Order No. 32866, par. 18 required the Company to adjust its 2015 RAM Revenue Adjustment to reflect the O&M expense reduction impact associated with the change in on-cost clearing allocation identified by the Company. The adjustment made to the 2015 RAM revenue adjustment was based on the 2014 O&M expense impact of the change in on-cost clearing allocation. In calculating the 2017 RAM revenue adjustment determined according to existing tariffs and procedures, the adjustment has been updated to reflect the 2016 O&M impact of the change in on-cost clearing allocation. See HECO-WP-A1-001 for the calculation.

HAWAIIAN ELECTRIC COMPANY, INC.  
DECOUPLING CALCULATION WORKBOOK  
SUMMARY OF ACCUMULATED REVENUE BALANCING ACCOUNT

Line No.	Month	Beginning Balance	Target Revenues	Recorded Adjusted Revenue	Variance to RBA	Adjustment for prior year RBA accrual	Adjustment	Tax-effected Balance Subject to Interest	Interest at 1.75%/year	Ending Balance
	(e)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
Monthly RBA Balance and Activity (Monthly PUC Rpt., Pg. 9A)										
1	2015 December	\$ 46,800,182	\$ 48,247,991	\$ 45,122,645	\$ 3,125,346	\$ (4,677,639)	\$ 150	\$ 28,055,078	\$ 40,914	\$ 45,088,941
2	February 2016 Adjustment - Note (1)									\$ 11,204
3	February 2016 Adjustment - Note (1)									\$ 276,538
4	REVISED 2015 December									\$ 45,376,681
5										
6	2016 January	\$ 45,088,941	\$ 47,308,677	\$ 43,233,334	\$ 4,075,343	\$ (4,634,357)	\$ -	\$ 27,374,083	\$ 39,921	\$ 44,569,848
7	February	\$ 44,569,848	\$ 42,407,239	\$ 41,404,808	\$ 1,002,431	\$ (4,381,515)	\$ 309,769	\$ 26,384,817	\$ 38,478	\$ 41,539,011
8	March	\$ 41,539,011	\$ 47,308,677	\$ 43,945,293	\$ 3,363,414	\$ (4,548,813)	\$ 130,784	\$ 25,093,885	\$ 36,595	\$ 40,520,971
9	April	\$ 40,520,971	\$ 45,793,747	\$ 42,792,611	\$ 3,001,136	\$ (4,608,612)	\$ 113,233	\$ 24,332,432	\$ 35,485	\$ 39,082,213
10	May	\$ 39,082,213	\$ 49,296,788	\$ 46,044,763	\$ 3,252,025	\$ (4,848,387)	\$ 15,028	\$ 23,384,878	\$ 34,103	\$ 37,514,982
11	June	\$ 37,514,982	\$ 50,202,656	\$ 44,354,039	\$ 5,848,617	\$ (3,792,632)	\$ 22,849	\$ 23,559,861	\$ 34,358	\$ 39,628,174
12	July	\$ 39,628,174	\$ 51,980,790	\$ 47,632,191	\$ 4,348,629	\$ (4,131,705)	\$ 42,035	\$ 24,300,790	\$ 35,439	\$ 39,922,572
13	August	\$ 39,922,572	\$ 53,581,111	\$ 49,694,341	\$ 3,886,770	\$ (4,323,881)	\$ -	\$ 24,255,184	\$ 35,372	\$ 39,520,833
14	September	\$ 39,520,833	\$ 51,447,350	\$ 48,441,855	\$ 5,005,495	\$ (4,085,864)	\$ (144,868)	\$ 24,335,878	\$ 35,490	\$ 40,331,086
15	October	\$ 40,331,086	\$ 52,040,061	\$ 47,122,581	\$ 4,917,480	\$ (4,075,714)	\$ 10,348	\$ 24,901,699	\$ 36,315	\$ 41,219,515
16	November	\$ 41,219,515	\$ 48,957,962	\$ 43,941,301	\$ 5,016,661	\$ (3,736,832)	\$ 70,699	\$ 25,615,115	\$ 37,355	\$ 42,607,388
17	December	\$ 42,607,388	\$ 48,957,962	\$ 44,527,809	\$ 4,430,153	\$ (3,844,438)	\$ (4,678)	\$ 26,204,786	\$ 38,215	\$ 43,226,450
18	January 2017 Adjustment - Note (1)									\$ 1,162
19	REVISED 2016 December									\$ 43,227,612
20										To Sch A
21	2017 January	\$ -	\$ 48,009,823	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
22	February	\$ -	\$ 43,030,848	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
23	March	\$ -	\$ 48,009,823	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
24	April	\$ -	\$ 46,468,574	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
25	May	\$ -	\$ 50,024,842	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
26	June	\$ -	\$ 51,184,359	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
27	July	\$ -	\$ 52,097,265	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
28	August	\$ -	\$ 54,628,879	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
29	September	\$ -	\$ 52,453,393	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
30	October	\$ -	\$ 53,057,695	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
31	November	\$ -	\$ 49,915,326	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
32	December	\$ -	\$ 49,915,326	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Sources of Data: Sch. B1 Sch B2 Cols (c)-(d) Note (2) Note (1) Cols ((b)+(g)+((e)+(f))/2)/(f) Cols ((b)+(e)+(f)+(g)+(i))

Composite Federal & State Income Tax Rate 38.91% (k)  
Income Tax Factor (1 / 1-tax rate) 1.636929121 (f)  
(See HECO-WP-F-001)

Note (1): Adjustment Summary:

Year	Month	Workpaper Reference	RBA True-up Adjustment Sch B2, Line 19	RBA Interest Adjustments	Total Adjustment	Adjustment Description
2016	February	HECO-WP-B-002	11,204	-	11,204	Prior period adjustments
2016	February	HECO-WP-B-003	274,840	1,896	276,538	Prior period adjustments (prior to 2016)
2016	February	HECO-WP-B-003	21,773	256	22,029	Prior period adjustments (on and subsequent to January 1, 2016)
2016	March	HECO-WP-B-004	123,827	1,688	125,525	Prior period adjustments
2016	March	HECO-WP-B-005	5,239	-	5,239	Prior period adjustments
2016	April	HECO-WP-B-006	107,221	6,012	113,233	Prior period adjustments
2016	May	HECO-WP-B-007	15,028	-	15,028	Prior period adjustments for multiple customers
2016	June	HECO-WP-B-008	22,849	-	22,849	Prior period adjustments for multiple customers
2016	July	HECO-WP-B-009	42,035	-	42,035	Prior period adjustments
2016	September	HECO-WP-B-010	(144,043)	(825)	(144,868)	Prior period adjustments
2016	October	HECO-WP-B-011	10,348	-	10,348	Prior period adjustments for multiple customers
2016	November	HECO-WP-B-012	35,150	-	35,150	Prior period adjustments for multiple customers
2016	November	HECO-WP-B-013	21,608	-	21,608	Prior period adjustments for multiple customers
2016	November	HECO-WP-B-014	13,941	-	13,941	Prior period adjustments for multiple customers
2016	December	HECO-WP-B-015	(4,678)	-	(4,678)	Prior period adjustments
2017	January	HECO-WP-B-016	1,162	-	1,162	Prior period adjustments

Note (2):

Amounts represent recovery of prior years' RBA balance through the RBA rate adjustment effective June 1, 2015 for the period June 2015 through May 2016 and June 1, 2016 for the period June 2016 through May 2017. See WP-B-001.

**HAWAIIAN ELECTRIC COMPANY, INC.**  
**DECOUPLING CALCULATION WORKBOOK**  
**DETERMINATION OF TARGET REVENUES**

Line No.	Description (a)	Reference (b)	Docket No. 2010-0080 Amounts (c)	Docket No. 2010-0080 Amounts (d)	Docket No. 2010-0080 Amounts (e)	Docket No. 2010-0080 Amounts (f)	Docket No. 2010-0080 Amounts (g)	Docket No. 2010-0080 Amounts (h)
1	<u>Last Rate Case Annual Electric Revenue at Approved Rate Levels</u>	Note (1)	\$000s \$ 1,765,954	\$ 1,765,954	\$ 1,765,954	\$ 1,765,954	\$ 1,765,954	\$ 1,765,954
2	Less: Fuel Expense	Note (1)	\$000s \$ (858,172)	\$ (858,172)	\$ (858,172)	\$ (858,172)	\$ (858,172)	\$ (858,172)
3	Purchased Power Expense	Note (1)	\$000s \$ (438,707)	\$ (438,707)	\$ (438,707)	\$ (438,707)	\$ (438,707)	\$ (438,707)
4	Revenue Taxes on Line 1 (8.885% statutory rates)		\$000s \$ (156,905)	\$ (156,905)	\$ (156,905)	\$ (156,905)	\$ (156,905)	\$ (156,905)
5	<u>Last Rate Order Target Annual Revenues</u>	Sum Lines 1...4	\$000s \$ 512,170	\$ 512,170	\$ 512,170	\$ 512,170	\$ 512,170	\$ 512,170
6	Add: Authorized RAM Revenues	Note (2)	\$000s \$ 77,370	\$ 77,370	\$ -	\$ -	\$ -	\$ -
7	Less: Revenue Taxes on Line 6 at 8.885%		\$000s \$ (6,874)	\$ (6,874)	\$ -	\$ -	\$ -	\$ -
8	Net RAM Adjustment - Test Year +4	Lines 6+7	\$000s \$ 70,495	\$ 70,495	\$ -	\$ -	\$ -	\$ -
9	Authorized RAM Revenues	Note (3)	\$000s \$ -	\$ -	\$ 88,395	\$ 88,395	\$ -	\$ -
10	Less: Revenue Taxes on Line 9 at 8.885%		\$000s \$ -	\$ -	\$ (7,854)	\$ (7,854)	\$ -	\$ -
11	Net RAM Adjustment - Test Year +5	Lines 9+10	\$000s \$ -	\$ -	\$ 80,541	\$ 80,541	\$ -	\$ -
12	Authorized RAM Revenues	Sch. A, Line 4	\$000s \$ -	\$ -	\$ -	\$ -	\$ 101,131	\$ 101,131
13	Less: Revenue Taxes on Line 12 at 8.885%		\$000s \$ -	\$ -	\$ -	\$ -	\$ (8,986)	\$ (8,986)
14	Net RAM Adjustment - Test Year +6	Lines 12+13	\$000s \$ -	\$ -	\$ -	\$ -	\$ 92,146	\$ 92,146
15	Less: <u>EARNINGS SHARING REVENUE CREDITS</u>		\$000s \$ -	\$ -	\$ -	\$ -	\$ (16)	\$ (16)
16	Less: Revenue Taxes on Line 15 at 8.885%		\$000s \$ -	\$ -	\$ -	\$ -	\$ 1	\$ 1
17	Net Earnings Sharing Revenue Credits	Lines 15 + 16	\$000s \$ -	\$ -	\$ -	\$ -	\$ (14)	\$ (14)
18	<u>PUC-ORDERED MAJOR OR BASELINE CAPITAL CREDITS:</u>	Sch. A, Line 6	\$000s \$ -	\$ -	\$ -	\$ -	\$ -	\$ -
19	<u>Total Annual Target Revenues</u>							
20	June 1, 2015 Annualized Revenues w/ RAM Increase	Col (c), lines (5+8+17+18)	\$000s \$ 582,665	\$ 582,665				
21	June 1, 2016 Annualized Revenues w/ RAM Increase	Col (e), lines (5+11+17+18)			\$ 592,711	\$ 592,711		
22	June 1, 2017 Annualized Revenues w/ RAM Increase	Col (g), lines (5+14+17+18)					\$ 604,302	\$ 604,302
23	<u>Distribution of Target Revenues by Month:</u>	Note (4) Note (5)	2015	2016	2016	2017	2017	2018
24	January	8.10% 8.26%		\$47,308,677		\$48,009,623		\$48,948,443
25	February	7.26% 7.41%		\$42,407,239		\$43,030,848		\$43,872,308
26	March	8.10% 8.26%		\$47,308,677		\$48,009,623		\$48,948,443
27	April	7.84% 8.00%		\$45,793,747		\$46,468,574		\$47,377,258
28	May	8.44% 8.61%		\$49,296,788		\$50,024,842		\$51,003,069
29	June	6.47% 6.62%	\$48,047,584		\$50,202,656		\$51,184,359	
30	July	8.77% 8.95%	\$51,228,833		\$51,980,790		\$52,997,265	
31	August	9.04% 9.21%	\$52,792,780		\$53,581,111		\$54,628,879	
32	September	8.68% 8.86%	\$50,702,234		\$51,447,350		\$52,453,393	
33	October	8.78% 8.96%	\$51,284,900		\$52,040,061		\$53,057,695	
34	November	8.26% 8.43%	\$48,247,991		\$48,957,862		\$49,915,326	
35	December	8.26% 8.43%	\$48,247,991		\$48,957,862		\$49,915,326	
36	<u>Total Distributed Target Revenues</u>	100.00% 100.00%	\$350,550,113	\$232,115,128	\$357,167,692	\$235,543,510	\$364,152,243	\$240,149,521

**Footnotes:**

- Docket No. 2010-0080 amounts derived from Order No. 30576, filed August 9, 2012, effective September 1, 2012, which implemented Decision and Order No. 30505, Exhibit A, page 1, filed June 29, 2012.
- Transmittal 15-03 filed June 3, 2015, revising 2015 target revenue effective June 8, 2015.
- Transmittal 16-01 filed March 31, 2016, establishing 2016 target revenue effective June 1, 2016.
- RBA Tariff Revised July 26, 2011 to reflect 2011 test year.

Derivation of RAM Revenue Allocation, for June 8, 2015 to May 31, 2016		Scale to total 100.00%
June is a partial month		
January	8.10%	8.26%
February	7.26%	7.41%
March	8.10%	8.26%
April	7.84%	8.00%
May	8.44%	8.61%
June- effective date of RAM Change is June 8, 2015	6.49%	6.62%
July	8.77%	8.95%
August	9.04%	9.21%
September	8.68%	8.86%
October	8.78%	8.96%
November	8.26%	8.43%
December	8.26%	8.43%
<u>Total Distributed Target Revenues</u>	<u>98.02%</u>	<u>100.00%</u>

HAWAIIAN ELECTRIC COMPANY, INC.  
RECORDING CALCULATION WORKBOOK  
DETERMINATION OF RECORDED ADJUSTED REVENUES

Line No.	Description	January 2016	February 2016	March 2016	April 2016	May 2016	June 2016	July 2016	August 2016	September 2016	October 2016	November 2016	December 2016
		(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
1	BILLED REVENUES:												
2	Current month billed revenues (GAPD 14w)	118,135,718	118,099,083	107,260,110	115,319,390	110,863,072	122,104,982	125,510,559	140,991,711	138,837,935	134,444,994	122,014,178	126,471,516
3	Remove PBF revenues	(1,323,136)	(1,324,760)	(1,226,501)	(1,302,501)	(1,290,587)	(1,402,513)	(1,556,296)	(1,850,810)	(1,850,810)	(1,810,347)	(1,851,710)	(1,708,604)
4	Remove Saver non-revenues	-	-	-	-	-	-	-	-	-	-	-	-
5	City & County traffic revenue adjustments	-	-	-	-	-	-	-	-	-	-	-	-
6	Other electric revenues adjustments	-	-	-	-	-	-	-	-	-	-	-	-
7	sum 1-5	116,812,580	116,774,324	106,032,176	114,017,244	109,562,285	120,702,468	124,353,264	139,140,901	136,986,991	132,632,647	120,162,458	124,754,196
8	UNBILLED REVENUES:												
9	Current month unbilled revenues (Unbilled Sales and Revenue Est)	63,197,764	58,200,781	60,352,271	56,840,123	65,129,277	63,050,821	71,570,833	74,240,535	68,755,049	66,394,428	65,980,141	65,855,044
10	Revenue prior month's unbilled revenues (Unbilled Sales and Revenue Est)	(60,141,733)	(63,197,764)	(56,200,781)	(60,352,271)	(56,840,123)	(63,050,821)	(71,570,833)	(74,240,535)	(68,755,049)	(66,394,428)	(65,980,141)	(65,855,044)
11	Unbilled revenues per Unbilled Sales and Revenue Estimate	2,743,031	(6,996,972)	4,151,476	(3,512,147)	8,289,153	(2,078,455)	8,319,812	2,689,992	(4,454,586)	(3,391,323)	(4,044,853)	(135,087)
12	Recovery of 12-31-14 RBA balance through RBA Rate Adjustment beginning 0-1-15	(5,088,272)	(4,808,775)	(4,992,387)	(5,058,017)	(5,321,173)	-	(4,534,806)	(4,745,520)	(4,484,264)	(4,473,154)	(4,101,226)	(4,210,325)
13	RAM accrual	-	-	2,223,016	740,832	799,050	-	(4,182,497)	(4,745,520)	(4,484,264)	(4,473,154)	(4,101,226)	(4,210,325)
14	Accrual of ECAC adjustment	1,718,800	853,900	234,900	(20,300)	2,091,100	2,570,700	685,100	(1,475,500)	312,700	2,515,400	2,030,500	265,400
15	Reversal of ECAC accrual	(4,950,434)	(1,599,334)	(1,599,334)	(1,599,334)	(750,200)	(750,200)	(750,200)	(1,530,100)	(1,530,100)	(1,530,100)	(1,530,100)	(1,530,100)
16	Accrual of PPAC adjustment	2,120,300	1,385,100	2,973,300	1,922,700	685,400	(1,376,800)	(1,376,800)	(725,200)	(725,200)	(725,200)	(725,200)	(725,200)
17	Reversal of PPAC accrual	(262,000)	(954,033)	(854,033)	(854,033)	(854,033)	(2,162,889)	(2,162,889)	(378,400)	(378,400)	(378,400)	(523,087)	(523,087)
18	Remove Big Wind surcharge carrying costs	-	-	(263)	(174)	(174)	-	-	-	-	-	-	-
19	Remove Big Wind surcharge	-	-	307,617	126,068	107,221	15,028	22,849	42,035	-	10,348	70,609	(4,878)
20	Adjust prior period RBA balance	-	-	20,997	12,588	10,458	2,278	4,099	1,009	1,009	1,009	6,883	(478)
21	Adjust prior period RBA related revenue taxes	4,075,343	1,002,431	3,363,414	3,001,138	3,252,025	5,845,617	4,348,679	3,686,770	5,005,485	4,917,480	5,016,681	4,430,153
22	RBA gross up for revenue taxes	397,403	97,751	327,880	262,653	317,118	570,322	424,052	378,014	488,106	479,523	489,195	432,002
23	sum 10-22	(1,899,206)	(3,875,609)	1,718,330	(912,099)	557,250	(1,044,592)	(3,832,002)	(20,448)	2,510,338	5,067,289	2,209,443	2,074,348
24	UNBILLED REVENUES	743,823	(10,672,581)	5,869,809	7,377,654	7,377,654	7,473,220	(1,282,100)	(1,282,100)	(4,844,034)	(4,844,034)	(4,844,034)	(4,844,034)
25	TOTAL REVENUES PER QTR (PUC Monthly Financial Report pg. 3)	117,596,403	106,101,742	111,891,985	106,833,120	117,029,314	119,155,233	131,838,483	137,848,701	132,144,356	131,744,882	123,023,282	126,820,541
26	Billed Adjustments to Determine Adjusted Revenues for RBA:												
27	Add back C&C unbilled revenue	-	-	8,433	345	335	396	387	-	8,911	360	321	8,778
28	Add back other unbilled revenues (e.g., unrecorded revenue taxes on PBF surcharge)	317	-	674	-	-	-	-	-	-	-	-	-
29	Add back other unbilled revenues (e.g., unrecorded revenue taxes on PBF surcharge)	-	-	-	-	-	-	-	-	-	-	-	-
30	Remove TY 2013 refund	(8)	(3)	(11)	-	-	(13)	-	(1)	(4)	(13)	(125)	(4)
31	Remove ECAC revenues	18,332,012	22,135,541	24,907,869	26,889,886	28,424,770	20,275,127	23,887,778	21,918,488	18,700,885	21,889,886	21,262,025	20,740,337
32	Remove PPAC revenues	(12,060,045)	(13,285,204)	(14,745,720)	(14,522,798)	(18,562,831)	(18,562,831)	(18,562,831)	(17,028,919)	(15,443,753)	(14,559,580)	(14,559,580)	(14,559,580)
33	Remove REIP revenues	(113,252)	(108,842)	(100,555)	(112,034)	(90,730)	(16,991)	(3)	1	(485)	1	116	116
34	Remove DSM revenues	(249,972)	(280,024)	(240,615)	(335,972)	(394,397)	(432,426)	(426,524)	(470,823)	(459,724)	(453,134)	(411,825)	(424,437)
35	Remove RPR revenues	-	-	-	-	-	-	-	-	-	-	-	-
36	Remove revenue taxes of PBF revenues	(90,242)	(90,355)	(83,654)	(92,849)	(88,021)	(96,694)	(106,144)	(128,294)	(128,294)	(128,294)	(128,294)	(128,294)
37	Remove Saver revenues	-	-	3,377	3,377	3,377	15	7	7	7	7	7	7
38	Remove revenue taxes on billed revenues	(10,220,511)	(11,087,520)	(10,415,419)	(11,428,718)	(10,829,915)	(11,800,802)	(11,670,822)	(13,241,506)	(12,268,683)	(12,268,683)	(11,270,013)	(11,584,105)
39	Remove base fuel (adjusted for revenue taxes)	(45,042,811)	(40,720,233)	(45,042,811)	(40,720,233)	(45,042,811)	(40,720,233)	(45,042,811)	(40,720,233)	(45,042,811)	(40,720,233)	(45,042,811)	(40,720,233)
40	Remove power purchase energy (adjusted for revenue taxes)	(18,186,025)	(19,186,025)	(18,186,025)	(19,186,025)	(18,186,025)	(19,186,025)	(18,186,025)	(19,186,025)	(18,186,025)	(19,186,025)	(18,186,025)	(19,186,025)
41	Other adjustments	307,817	307,817	129,086	107,211	15,028	22,849	42,035	378,014	488,106	479,523	489,195	432,002
42	Other operating revenues - EVJ revenues net of revenue taxes	354	713	1,751	1,530	1,874	1,884	2,240	2,240	2,113	2,695	2,348	2,689
43	Unbilled Adjustments to Determine Adjusted Revenues for RBA:												
44	Remove RAM accrual	-	-	(2,223,016)	(740,832)	(799,050)	-	-	-	-	-	-	-
45	Remove ECAC revenues	1,741,969	1,311,994	4,014,458	(1,102,028)	2,535,431	(3,824,018)	(987,537)	(2,115,472)	(2,354)	1,610,783	(512,303)	(877,100)
46	Remove ECAC accrual	3,716,834	745,434	1,384,434	1,819,632	(1,304,900)	(1,820,500)	71,100	3,014,666	1,226,466	(976,232)	(2,198,634)	(424,634)
47	Remove PPAC revenues	(391,346)	25,574	(820,789)	415,284	(1,734,053)	593,452	(854,542)	852,220	441,754	249,705	82,208	81,949
48	Remove REIP revenues	(2,391,300)	(441,067)	(2,019,267)	(668,669)	1,280,499	3,544,799	1,257,702	437,800	(345,000)	(588,000)	(1,386,233)	(1,147,333)
49	Remove REIP carrying costs	3,971	5,328	(6,686)	3,383	39,154	10,937	7	-	-	-	-	-
50	Remove Big Wind surcharge carrying costs	-	-	178	91	13	17,365	(25,653)	(2,786)	12,467	6,300	3,623	3,219
51	Remove DSM revenues	-	-	(19,431)	(68,497)	(20,966)	-	-	-	-	-	-	-
52	Remove excess DSM revenues	-	-	(117,677)	(118,493)	(118,493)	(48,134)	-	-	-	-	-	-
53	Remove prior period RBA adjustments	(4,075,343)	(337,614)	(343,462)	(3,001,138)	(3,252,025)	(5,845,617)	(4,348,679)	(3,686,770)	(5,005,485)	(4,917,480)	(5,016,681)	(4,430,153)
54	Remove RBA accruals for revenue taxes	(397,403)	(97,751)	(327,880)	(262,653)	(317,118)	(570,322)	(424,052)	(378,014)	(488,106)	(479,523)	(489,195)	(432,002)
55	Remove revenue taxes on unbilled revenues	85,173	928,514	(2,064,458)	833,445	(335,724)	838,482	(187,243)	298,906	754,071	532,884	438,225	466,139
56	Remove base fuel (adjusted for revenue taxes)	(1,001,878)	2,354,423	(2,750,638)	1,492,342	(3,441,935)	1,976,643	(2,949,208)	(389,010)	1,403,000	894,588	362,630	349,205
57	Remove power purchase energy (adjusted for revenue taxes)	(875,819)	993,311	(1,150,470)	629,606	(1,452,123)	833,826	(1,244,245)	(184,120)	591,813	293,041	161,428	147,327
58	sum 26-57	(74,383,069)	(84,996,834)	(87,945,722)	(85,890,509)	(70,861,551)	(74,801,194)	(84,206,322)	(88,154,360)	(80,072,501)	(84,022,081)	(81,003,061)	(82,300,733)
59	RECORDED ADJUSTED REVENUES FOR RBA DETERMINATION	43,213,334	41,604,608	43,945,263	42,762,611	46,167,763	44,354,039	47,632,161	49,694,341	48,441,855	47,122,861	43,841,301	44,527,809
25-58	PUC Monthly Financial Report pg. 9A.1)												

NOTE: Totals may not add exactly due to rounding.



**HAWAIIAN ELECTRIC COMPANY, INC.**  
**DECOUPLING CALCULATION WORKBOOK**  
**DETERMINATION OF O&M RAM ADJUSTMENT**  
**(\$ In Thousands)**

Line No.	Description	Reference	Docket No. 2010-0080 Approved	Footnote 4 Previously Approved RAM	O&M Subject to Escalation Col (c) + (d)	Net Inflation Indices Footnote 2	2017 O&M RAM Adjustment Col (e) * (f)
	(e)	(b)	(c)	(d)	(e)	(f)	(g)
1	Base BU Labor Expenses	Schedule C1	\$ 51,224		\$ 51,224	13.18%	\$ 6,751
2	Base Non-Labor Expense	Schedule C2	\$ 139,463		\$ 139,463	9.99%	\$ 13,932
3	Payroll Taxes	Footnote 1	\$ 4,708		\$ 4,708	13.18%	\$ 620
4	Subtotal Expense Increase - RAM Adjustment before revenue taxes						\$ 21,304
5	Revenue Tax Factor (Footnote 3)						1.0975
6	O&M RAM (SubTotal Expenses x Rev Tax Factor)						\$ 23,381 To Sch A1

**Footnotes:**

1: Payroll Taxes per Interim D&O in Docket No. 2010-0080, Exhibit A, page 3	\$ 8,905
Less: Portion of payroll taxes related to non-BU labor <sup>A</sup> (47.14% * 8,905)	\$ (4,197)
Payroll Taxes related to Bargaining Unit labor	\$ 4,708

<sup>A</sup> See Schedule C1 for calculation of percentage related to non-BU labor.

**2: Escalation Rates**

Labor:	2012	2013	2014	2015	2016	2017
Bargaining Unit Wage Increase	2.46%	2.88%	3.00%	2.91%	3.07%	2.75% (See HECO-WP-C-001)
Less: Labor Productivity Offset	0.76%	0.76%	0.76%	0.76%	0.76%	0.78% Approved in Final D&O in Docket No. 2008-0274, page 51, filed on August 31, 2010
Labor Cost Escalation Rate	1.70%	2.12%	2.24%	2.16%	2.31%	1.99%

**Calculation of 2012-2017 Compounded Labor Cost Escalation**

2012 Labor Cost Escalation	1.0170	A (2012 labor escalation plus 1)
2013 Labor Cost Escalation	1.0212	B (2013 labor escalation plus 1)
2014 Labor Cost Escalation	1.0224	C (2014 labor escalation plus 1)
2015 Labor Cost Escalation	1.0215	D (2015 labor escalation plus 1)
2016 Labor Cost Escalation	1.0231	E (2016 labor escalation plus 1)
2017 Labor Cost Escalation	1.0199	F (2017 labor escalation plus 1)
2012-2017 Compounded Labor Cost Escalation	1.1318	G = A * B * C * D * E * F
2012-2017 Compounded Labor Cost %	0.1318	H = G - 1

Non-Labor:	2012	2013	2014	2015	2016	2017
GDP Price Index	1.70%	1.70%	1.60%	1.10%	1.50%	2.00% (See HECO-WP-C-002)

**Calculation of 2012-2017 Compounded Non-Labor Cost Escalation**

2012 Non-Labor Cost Escalation	1.0170	A (2012 non-labor escalation plus 1)
2013 Non-Labor Cost Escalation	1.0170	B (2013 non-labor escalation plus 1)
2014 Non-Labor Cost Escalation	1.0160	C (2014 non-labor escalation plus 1)
2015 Non-Labor Cost Escalation	1.0110	D (2015 non-labor escalation plus 1)
2016 Non-Labor Cost Escalation	1.0150	E (2016 non-labor escalation plus 1)
2017 Non-Labor Cost Escalation	1.0200	F (2017 non-labor escalation plus 1)
2012-2017 Compounded Non-Labor Cost Escalation	1.0999	G = A * B * C * D * E * F
2012-2017 Compounded Non-Labor Cost %	0.0999	H = G - 1

**3: Computation of Revenue Tax Factor**

Public Service Tax Rate	0.05885
PUC Fees Rate	0.00500
Franchise Tax Rate	0.02500
Total Revenue Tax Rate	0.08885

Revenue Tax Factor	
= 1 / (1 - Total Revenue Tax Rate)	1.0975

4: Column d "Previously Approved RAM" is not used as the labor and non-labor escalation is accomplished through the use of a compounded escalation rate in column f, as shown in footnote 2.

HAWAIIAN ELECTRIC COMPANY, INC.

**DECOUPLING CALCULATION WORKSHEET**  
**RATE ADJUSTMENT MECHANISM**  
**SUMMARY OF**  
**OPERATIONS AND MAINTENANCE LABOR AND NON-LABOR EXPENSE**  
**BY BLOCK OF ACCOUNTS**  
Final D&O - Docket No. 2010-0080  
('000)

Line No.	DESCRIPTION	Footnote 1		Footnote 2	
		(a)	(b)	(c)=(a)+(b) TOTAL	(d) (e)
		BU LABOR	NON-BU LABOR	LABOR	NON-LABOR TOTAL
1	Production	26,585	12,400	38,985	52,838 91,823
2	Transmission	3,519	2,373	5,892	10,103 15,995
3	Distribution	12,559	4,838	17,397	24,148 41,545
4	Customer Accounts	6,136	2,357	8,492	6,119 14,611
5	Allowance for Uncoll Accounts	-	-	-	1,463 1,463
6	Customer Service	152	3,238	3,390	3,197 6,587
7	Administrative & General	2,273	20,484	22,757	63,621 86,378
8	<b>Operation and Maintenance</b>	<b>51,224</b>	<b>45,690</b>	<b>96,913</b>	<b>161,489 258,402</b>

Percentage of Total O&M Labor 52.86% 47.14% 100%

\* amounts may not add due to rounding

**Footnotes:**

1 See Letter dated October 4, 2011, Subject: Hawaiian Electric Supplemental and Revised Responses, filed in Docket No. 2010-0080, Attachment, page 1: Worksheet showing the breakdown of the 2011 test year labor expenses between BU and non-BU.

O&M breakdown above excludes fuel from original schedule. Refer to O&M recalculation below which includes fuel component.

	BU LABOR	NON-BU LABOR		BU+NON BU	
		MERIT	OTHER	TOTAL	TOTAL
FUEL	333	829	11	840	1,173
PRODUCTION	26,585	12,370	30	12,400	38,985
TRANSMISSION	3,519	2,373	-	2,373	5,892
DISTRIBUTION	12,559	4,838	-	4,838	17,397
CUSTOMER ACCOUNTS	6,136	2,357	-	2,357	8,493
CUSTOMER SERVICE	152	3,238	-	3,238	3,390
ADMIN & GENERAL	2,273	20,462	22	20,484	22,757
<b>TOTAL</b>	<b>51,557</b>	<b>46,467</b>	<b>63</b>	<b>46,530</b>	<b>98,087</b>
% of TOTAL BU/NON BU LABOR	52.56%			47.44%	100.00%
% of TOTAL BU/NON BU LABOR (excluding fuel)	52.86%			47.14%	100.00%

2 See Letter dated December 14, 2012, Subject: Docket No. 2010-0080 - Hawaiian Electric 2011 Test Year Rate Case Hawaiian Electric Worksheet Showing Updated Labor/Non-Labor Expense Split for RAM Calculation, Attachment 1, pages 1-3.

Hawaiian Electric Company, Inc.  
DECOUPLING CALCULATION WORKBOOK  
Non-Labor Exclusion  
Adjustment for O&M RAM  
(\$ thousands)

Line No.	Description (a)	Amount (b)	Reference (c)
1	Pension Expense	31,617	See Parties' Stipulated Settlement Letter, filed July 5, 2011, in Docket No. 2010- 0080, HECO T-15 Attachment 1, page 1
2			
3			
4	OPEB Expense	(463)	See Parties' Stipulated Settlement Letter, filed July 5, 2011, in Docket No. 2010- 0080, HECO T-15 Attachment 1, page 1
5			
6			
7	Total before amounts transferred	31,154	
8			
9	O&M %	70.70%	See Parties' Stipulated Settlement Letter, filed July 5, 2011, in Docket No. 2010- 0080, HECO T-15 Attachment 1, page 1
10	(1- transfer rate of 29.3%)		
11			
12			
13	Adjustment to Non-Labor O&M Expense for O&M RAM base	22,026	
14			
15			
16			
17	Non-Labor O&M Expense per Interim D&O	161,489	Schedule C1
18			
19			
20	Non-Labor O&M Expense Base for O&M RAM base	139,463	
21			

**HAWAIIAN ELECTRIC COMPANY, INC.**  
**DECOUPLING CALCULATION WORKBOOK**  
**DETERMINATION OF RATE BASE RAM ADJUSTMENT - RETURN ON INVESTMENT**

Line No.	Description (a)	AMOUNTS IN THOUSANDS (b)	PERCENT OF TOTAL (c)	COST RATE (d)	POST TAX WEIGHTED EARNINGS REQMTS (e)	INCOME TAX FACTOR Note (1) (f)	PRETAX WEIGHTED EARNINGS REQMTS (g)
1	<u>PUC APPROVED CAPITAL STRUCTURE &amp; COSTS (Note (2)):</u>						
2	Short-Term Debt	\$ 38,210	2.35%	1.75%	0.04%	1.000000	0.04%
3	Long-Term Debt	624,620	38.36%	5.86%	2.25%	1.000000	2.25%
4	Hybrid Securities	27,994	1.72%	7.36%	0.13%	1.000000	0.13%
5	Preferred Stock	20,806	1.28%	5.46%	0.07%	1.63693	0.11%
6	Common Equity	916,533	56.29%	10.00%	5.63%	1.63693	9.21%
7	Total Capitalization	<u>\$ 1,628,163</u>	<u>100.00%</u>		<u>8.11%</u>		<u>11.74%</u>
8	RAM CHANGE IN RATE BASE \$000 (From Schedule D1)						\$ 514,092
9	PRETAX RATE OF RETURN (Line 7, Col g)						11.74%
10	PRETAX RETURN REQUIREMENT						\$ 60,354.4
11	REVENUE TAX FACTOR (1/(1-8.885%))						1.0975
12	RATE BASE RAM - RETURN ON INVESTMENT \$000						<u>\$ 66,239.0</u> To Sch A1

**Footnotes:**

1 Composite Federal & State Income Tax Rate 38.91% See HECO-WP-F-001  
Income Tax Factor ( 1 / 1-tax rate) 1.636929121

2 See Decision and Order No. 30505, Page 127, filed June 29, 2012, in which the commission accepted the proposed capital structure set forth in the Parties' Stipulated Settlement Letter, filed July 5, 2011, in Docket No. 2010-0080, Exhibit 1, Page 125 of 132.

**HAWAIIAN ELECTRIC COMPANY, INC.**  
**DECOUPLING CALCULATION WORKBOOK**  
**DETERMINATION OF RATE BASE RAM ADJUSTMENT - CHANGE IN RATE BASE**  
\$ in thousands

HECO 2011 Test Year Rate Base (Note 2)				HECO 2017 RAM Rate Base			
Line No.	Description	Beg. Balance	Budgeted Balance	Adjusted	RAM Projected	Estimated at	
		12/31/2010	12/31/2011	Recorded at 12/31/2016	Amounts	12/31/2017	
	(a)	(b)	(c)	(d)	(e)	(f)	
				Note (1)	See Detail Below		
1	Net Cost of Plant in Service	\$ 1,608,932	\$ 1,710,082	\$ 2,575,136	\$ 107,800	\$ 2,682,936	
2	Property Held for Future Use	4,090	4,090	0	0	0	Note (3)
3	Fuel Inventory	93,229	93,229	These Elements of Rate Base are Not Updated for RAM Purposes			
4	Materials & Supplies Inventories	18,229	18,229				
5	Unamort Net SFAS 109 Reg Asset	62,723	64,246				
6	Unamort EOTP Reg Asset	523	2,136				
7	CIP CT-1 Reg Asset			2,306	(954)	1,352	HECO-WP-D1-001A, Page 1
8	CIS Def Cost			10,266	(1,220)	9,046	HECO-WP-D1-001B, Page 1
9							
10							
11							
12	Unamort Sys Dev Costs	9,253	8,297	These Elements of Rate Base are Not Updated for RAM Purposes			
13	RO Pipeline Reg Asset	5,587	5,473				
14	Contrib In Excess of NPPC	-	19,411				
15	Total Additions	\$ 1,802,566	\$ 1,925,193	\$ 2,787,991	\$ 105,626	\$ 2,893,617	
16	Unamortized CIAC	\$ (189,314)	\$ (206,279)	\$ (347,826)	\$ (25,825)	\$ (373,651)	
17	Customer Advances	(1,879)	(1,855)	Not Updated			
18	Customer Deposits	(10,245)	(13,554)				
19	Accumulated Def Income Taxes	(213,833)	(271,014)	(524,166)	(36,295)	(560,461)	
20	Unamortized State ITC (Gross)	(32,171)	(35,088)	Not Updated			
21	Unamortized Gain on Sale	(800)	(516)				
22	Pension Reg Liability	(3,996)	(2,522)				
23	OPEB Reg Liability	(6,376)	(8,749)				
24	Total Deductions	\$ (458,614)	\$ (539,577)	\$ (930,868)	\$ (62,121)	\$ (992,988)	
25	Working Cash	21,047	21,047	21,047	Not Updated	21,047	
26	Rate Base at Proposed Rates	\$ 1,364,999	\$ 1,406,663	\$ 1,878,170		\$ 1,921,676	
27	Average Rate Base		\$ 1,385,831			\$ 1,899,923	
28	Change in Rate Base					\$ 514,092	To Schedule D
29	<b>Column (e) Projected Changes to Rate Base:</b>						
			Reference	Amount \$000			
30	Plant - Baseline Capital Project Additions		Schedule D2	244,397			
31	Major Project Additions		Schedule D3	2,736			
32	Accumulated Depreciation/Amortization Change		Schedule E	(139,333)			
33	Net Plant		Sum: Lines 30-32	107,800			
34	Accum. Deferred Income Taxes - Baseline and Major Capital Projects		Schedule F	(36,295)			
35	Projected CIAC Additions - Baseline		Schedule G	(33,235)			
36	Projected CIAC Additions - Major CIP		Schedule G2	(900)			
37	Less: Amortization of CIAC		Schedule G	8,309			
38	Total Change in CIAC in Rate Base		Sum: Lines 35-37	(25,825)			

**Footnotes:**

1	Amounts are recorded, except for the following adjustments:				
		Plant in Service	Acc. Depr.	CIAC Net	ADIT
				Schedule G	Schedule D4
[A]	Unadjusted Balance	\$ 4,285,017	\$ (1,395,562)	\$ (347,826)	\$ (525,719)
[A]	Add: Asset Retirement Obligation		(25,108)		
[A]	Reg Liab-Cost of Removal (net salvage)		(275,705)		
	Tenant Improvement Allowance (Sch E)	(13,362)	7,582		
	<b>Major Project Adjustments:</b>				
		HECO-WP-D2-001	HECO-WP-E-001	HECO-WP-D4-002	
	Waiau 8 Boiler Cils Upgrade	(1,075)	106		225
	Waiau 8 Main Transformer Replace	(243)	31		49
	Kahuku Wind Power	(7)	7		-
	W7 Controls Upgrade	(424)	28		86
	Kakaako Makal-huilei	(4,016)	528		682
	Kakaako Makal-Kewalo	(1,410)	117		248
	Kakaako Makal-DOT Queen-Cook	(1,276)	97		226
	BPT Tank 133 Improvements	(193)	4		37
	Total Adjustments	\$ (8,644)	\$ 918	\$ -	\$ 1,553
	Adjusted Balance	\$ 4,263,011	\$ (1,687,875)	\$ (347,826)	\$ (524,166)

2 See Hawaiian Electric Company, Inc. Decision and Order No. 30505, EXHIBIT B, Page 1 of 2,  
For Approval of Rate Increases and Revised Rate Schedules and Rules, filed June 29, 2012, in Docket No. 2010-0080.

3 In Transmittal No. 13-03 (Decoupling, Hawaiian Electric's RBA Rate Adjustment Tariff Filing, Hawaiian Electric's Response to the Division of Consumer  
Advocacy's Statement of Position and Revised RBA Rate Adjustment), Schedule D1, filed on May 14, 2013, these amounts were not updated for RAM  
purposes. However, in 2012 and 2013, the entire balance of Property Held for Future Use (PHFFU) was transferred to Plant in Service, resulting in a zero  
balance in PHFFU. Leaving these amounts unchanged from the balance at 12/31/11 would result in an overstatement of rate base by \$4,090.

Balance PHFFU at 12/31/11	\$ 4,090		
Less transfers to Plant in Service:			
CIP 1 Unit Addition - Land	(1,810)	Schedule D2: Amount transferred in 2013	
Kaloi Substation Land	(2,276)	Schedule D2: Amount transferred in 2013	
Kapolei Substation	(4)	Amount transferred in 2012	
Balance PHFFU at 12/31/13	\$ -	[A]	

[A] SOURCE: Hawaiian Electric Company, Inc. Monthly Financial Report - December 2016, pages 8 and 10, filed February 24, 2017.

**HAWAIIAN ELECTRIC COMPANY, INC.**  
**DECOUPLING CALCULATION WORKBOOK**  
**DETERMINATION OF BASELINE CAPITAL PROJECTS ADDITIONS**

Source: Docket No. 03-0257 General Order No. 7 Plant Additions Annual Reports filed with the PUC dated:

Line No.	Description (a)			3/22/2013	3/28/2014	3/27/2015	3/29/2016	NOTE (1)
				2012 (b)	2013 (c)	2014 (d)	2015 (e)	2016 (f)
1	Total Plant Additions			255,978,908	272,820,344	269,326,250	266,537,660	241,294,569
2	Less: Non-Utility Plant Additions		NOTE (3)				(63)	(3,954)
3	Adjusted Total Plant Additions			255,978,908	272,820,344	269,326,250	266,537,597	241,290,615
4								
5	Less Major Projects: (+\$2.5 Million)	Dkt No.	Item No.					
6								
7	2008 In-Service:							
8	CIP Generating Unit	05-0145	Y49000		(1,809,875)			
9								
10	2010 In-Service:							
11	Kamoku 46kv UG Alt Ph 1 (EOTP)	03-0417	Y48500	(69)				
12	K3 Biofuel Co-Firing	2009-0155	P0001577		(4,608)			
13	Kahuku Wind Power - NOTE (2)	2009-0176		NA	NA	NA	NA	NA
14								
15	2011 In-Service:							
16	W8 Boiler Controls Upgrade	2007-0365	P7650000	(118,460)	(45,384)	18,503	(70)	
17	EOTP Ph. 2 (Subs/Switch Stations)	2010-0062	Y48500	(6,607,578)	(184,448)	(7,357)	(55,681)	(682)
18	W7 Controls Upgrade	2009-0195	P7590000	(119,081)	(308,336)	(8,237)	(35)	
19	W8 Main Transformer Replace		P0001399	(19,800)	47,320			
20								
21	2012 In-Service:							
22	K1 Condenser Tube Replace	2010-0126	P0000681	(4,910,700)	(1,850)			
23	BPT Tank 132 Improvements	2010-0286	P0000899	(5,513,984)	(547)			
24	Mobile Radio Replacement	2010-0162	P0001595	(2,502,181)	(61,573)			
25	Kapolei Substation	2011-0026	Y00127	(6,217,064)	(780,700)	(6,459)		
26								
27	2013 In-Service:							
28	Pukele 80MVA Tsf #3	2011-0156	P0001494		(4,299,560)	(28,327)	15,611	
29	Kakaako Makai-Iwilei 25kV DL	2009-0042	Y00038		(6,661,331)	(485,650)	(496,818)	
30	Kaloi Substation - Land	2008-0070	Y00119		(2,276,439)			
31	North South Road 46kV Line	2008-0070	Y00119		(2,099,046)		(3,488)	
32								
33	2014 In-Service:							
34	Kaloi Substation	2008-0070	Y00119			(6,548,755)	(925)	
35	Kaloi Sub 46kV & 12kV Distr	2008-0070	Y00119			(1,218,895)		
36	Kaloi Telecomm	2008-0070	Y00119			(171,237)		
37	Kaloi Sub 12kV Work	2008-0070	Y00119			(25,906)		
38	Kakaako Makai-Kewalo 25kV DL	2009-0042	Y00038			(4,958,840)	(464,900)	(111)
39	Kakaako Makai OOT Queen-Cook	2009-0042	Y00038			(1,961,600)	(418,816)	(2,890,742)
40	BPT Tank 133 Improvements	2010-0318	P0000900			(6,095,787)	(1,092,308)	
41	Pukele 80MVA Tsf #2	2011-0156	P0001492			(3,449,859)	(40,084)	
42	DOT Airport DSG	2008-0329	P0001370			(4,965,396)	(97,130)	(172,652)
43								
44	2016 In-Service:							
45	Pukele 80MVA Tsf #1	2011-0156	P0002264					(3,839,121)
46								
47	Total Net Plant Additions (excluding major projects)			229,969,991	254,333,967	239,412,448	263,882,953	234,387,307
48								
49	Last Five-Year Average							\$ 244,397,333 Yo Sch D1

NOTE (1):  
Amounts per HECO-WP-D2-002 and the Hawaiian Electric Companies' Exemption From and Modification of General Order No. 7 Paragraph No. 2.3(g), Relating to Capital Improvements Capital Projects Completed in 2016, in Docket No. 03-0257, filed on March 30, 2017.

NOTE (2):  
In Hawaiian Electric Transmittal No. 11-02, Attachment 4.1, page 3 (Revised 5/10/11), filed May 10, 2011, the Company reflected the removal of the Kahuku Wind Power project, due to approval for recovery through the REIP surcharge (Decision and Order and Dissenting Opinion of Leslie H. Kondo, Commissioner, Docket No. 2009-0176, filed on May 12, 2010). However, because these costs were included as part of the 2010 and 2011 plant additions in Hawaiian Electric's 2011 rate case (Docket No. 2010-0080), the Company did not seek to recover these costs through the REIP surcharge (see the Renewable Energy Infrastructure Program ("REIP") - Annual Report, p.2, footnote 3, filed in Docket No. 2007-0416, dated January 31, 2012). The recorded cost of this project is \$2,132,812 as shown on HECO-WP-E-001.

NOTE (3):  
Source: UI Planner Budget files: Actuals Scenario. Adjustment to remove non-utility plant additions from utility plant. Chapin UG Duct Line is a non-utility asset. It is a contributed asset that was given to the Company. It is not being used and there are currently no plans to use it.

**HAWAIIAN ELECTRIC COMPANY, INC.**  
**DECOUPLING CALCULATION WORKBOOK**  
**DETERMINATION OF MAJOR CAPITAL PROJECT ADDITIONS**

<u>Line No.</u>	<u>Description</u> (a)	<u>PUC Docket Reference</u> (b)	<u>Estimated In Service Date</u> (c)	<u>Amount</u> (d)
1	ERP EAM Hardware	Docket No. 2014-0170 (D&O dated 8/11/2016)	Aug-17	2,590,000
2		UI Planner Budget files		
3	DOT Airport DSG	Docket No. 2008-0329 (D&O dated 6/25/2009)	Aug-14	138,537
4	2017 Straggling costs	UI Planner Budget files		
5	Pukele 80MVA Tsf#1	Docket No. 2011-0156 (D&O dated 10/12/2012)	Feb-16	7,418
6	2017 Straggling costs	UI Planner Budget files		
7	<b>Total Major Capital Projects Qualifying for 2017 RAM (See HECO-WP-D3-001)</b>			<b>\$ 2,735,955</b>

To Sch D1

See Schedule G2 for related CIAC (if applicable)

**HAWAIIAN ELECTRIC COMPANY, INC.**  
**DECOUPLING CALCULATION WORKBOOK**  
**DETERMINATION OF ADJUSTED RECORDED DEFERRED INCOME TAXES**

Line No.	NARUC Account (a)	Reference (b)	DR/(CR) Federal ADIT (c)	DR/(CR) State ADIT (d)	DR/(CR) Total ADIT (e)	
1	Recorded Deferred Income Tax Balances December 31, 2016 Recorded Balances					
2	Depreciation Related Account 282	HECO-WP-D4-001	(265,398,344)	(12,289,638)	(277,687,982)	
3	Other Deferred Income Taxes	HECO-WP-D4-001	(206,861,720)	(41,169,654)	(248,031,374)	
4	Total Recorded Deferred Income Taxes		<u>(472,260,064)</u>	<u>(53,459,292)</u>	<u>(525,719,356)</u>	To Sch D1
5	<u>Adjustments to Recorded Balances:</u>					
6	ADIT on Major Project excess depreciation	HECO-WP-D4-002	1,496,531	56,509	1,553,040	
7	Total Adjustments to Recorded ADIT Balances		<u>1,496,531</u>	<u>56,509</u>	<u>1,553,040</u>	To Sch D1
8	Adjusted Recorded ADIT Balances -12/31/16		<u>(470,763,533)</u>	<u>(53,402,783)</u>	<u>\$ (524,166,316)</u>	To Sch D1



**HAWAIIAN ELECTRIC COMPANY, INC.**  
**DECOUPLING CALCULATION WORKBOOK**  
**DETERMINATION OF DEPRECIATION & AMORTIZATION RAMP ADJUSTMENT**

Line No.	NARUC Account	Recorded Depreciable/Amort. Balance (Footnote 3)	Adjustments (Footnote 1)	Adjusted Depreciable/Amort. Balance	PUC Approved Accrual Rate	Annual Accrual
	(a)	(b)	(c)	(d)	(e)	(f)
1	<b>Depreciable Plant</b>					
2	311	95,674,371		95,674,371	0.01600	1,530,790
3	312	389,036,938	(1,691,184)	387,345,754	0.02030	7,863,119
4	314	188,528,015		188,528,015	0.01540	2,903,331
5	315	80,344,594	(243,014)	80,101,580	0.02430	1,946,468
6	Tot - Steam	753,583,918	(1,934,198)	751,649,720	0.01890	14,243,709
7						
8	341	38,209,235		38,209,235	0.00770	294,211
9	342	16,469,414		16,469,414	0.02580	424,911
10	343	67,718,691		67,718,691	0.03260	2,207,629
11	344	32,206,280		32,206,280	0.01010	325,283
12	345	33,795,588		33,795,588	0.02510	848,269
13	Tot - Gas Turb	188,399,208	-	188,399,208	0.02176	4,100,304
14						
15	Tot - Prod	941,983,126	(1,934,198)	940,048,928		18,344,013
16						
17	3501	2,972,364		2,972,364	-	-
18	352	60,034,234		60,034,234	0.01600	960,548
19	353	304,705,866		304,705,866	0.01860	5,667,529
20	354	15,386,451		15,386,451	0.01480	227,719
21	355	320,981,061		320,981,061	0.03240	10,399,786
22	356	163,891,186		163,891,186	0.03270	5,359,242
23	357	61,305,275		61,305,275	0.01590	974,754
24	358	63,756,758		63,756,758	0.01730	1,102,992
25	359	3,235,054		3,235,054	0.01490	48,202
26	Tot - Transm	996,268,249	-	996,268,249	0.02483	24,740,773
27						
28	3601	1,797,826		1,797,826	0.02340	42,069
29	361	22,410,914		22,410,914	0.01080	242,038
30	362	250,609,486		250,609,486	0.02020	5,062,312
31	364	212,058,452	(22,671)	212,035,781	0.03390	7,188,013
32	365	120,286,808	(16,406)	120,270,402	0.04190	5,039,330
33	366	308,681,580	(792,137)	307,889,443	0.02190	6,742,779
34	367	441,272,299	(5,558,788)	435,713,511	0.04980	21,698,533
35	368	232,460,989	(312,563)	232,148,426	0.05200	12,071,718
36	369.1	60,768,852		60,768,852	0.05250	3,190,365
37	369.2	203,452,719		203,452,719	0.04070	8,280,526
38	370	37,855,928		37,855,928	0.02660	1,006,968
39	Tot - Distr	1,891,655,853	(6,702,565)	1,884,953,288	0.03730	70,564,649
40						
41	Tot - T & D	2,887,924,102	(6,702,565)	2,881,221,537		95,305,422
42						
43	390	66,268,613		66,268,613	0.02450	1,623,581
44	Tot - General	66,268,613	-	66,268,613	0.02450	1,623,581
45						
46	Sub-Total	3,896,175,841	(8,636,763)	3,887,539,078		115,273,015
47						
48	3902 (King)	7,828,867		7,828,867	0.02316	181,308
49	3902 (CPP)	2,139,703		2,139,703	0.03295	70,511
50	3902 (Waterhouse)	1,517,450		1,517,450	-	-
51	3902 (Hon CI)	525,251		525,251	0.31169	163,716
52	3902 (ASB)	1,463,127		1,463,127	0.10904	159,534
53	3902 (Shinco)	939,475		939,475	-	-
54	3902 (PPP)	372,940		372,940	0.11111	41,438
55	3902 (Tenant Allowance)	13,381,548	(13,361,548)	-	-	-
56	Tot- LH Impr	28,148,361	(13,361,548)	14,786,813		616,506
57						
58	392	58,571,486		58,571,486	0.06130	3,590,432
59						
60	Utility Total Depreciation	3,982,895,688	(21,998,311)	3,960,897,377	0.03000	119,479,954

Line No.	NARUC Account	Recorded Depreciable/Amort. Balance (Footnote 3)	Adjustments (Footnote 1)	Adjusted Depreciable/Amort. Balance	PUC Approved Accrual Rate	Annual Accrual
	(a)	(b)	(c)	(d)	(e)	(f)
61	<b>Amortizable Plant</b>					
62	316	23,798,809		23,798,809	0.05000	1,189,940
63	Tot - Steam	23,798,809	-	23,798,809	0.05000	1,189,940
64						
65	346	18,832,072		18,832,072	0.05000	941,604
66	Tot - Gas Turb	18,832,072	-	18,832,072	0.05000	941,604
67						
68	Tot - Prod	42,630,881	-	42,630,881	0.05000	2,131,544
69						
70	3911	31,451,416		31,451,416	0.20000	6,290,283
71	3912	2,753,147		2,753,147	0.10000	275,315
72	3913	15,702,865		15,702,865	0.06870	1,047,381
73	393	1,393,909		1,393,909	0.04000	55,756
74	394	33,747,176		33,747,176	0.04000	1,349,887
75	395	680,466		680,466	0.06670	45,387
76	396	14,997		14,997	0.05560	834
77	397	121,345,888	(7,161)	121,338,727	0.06670	8,093,293
78	398	8,443,688		8,443,688	0.06670	563,194
79	Tot - General	215,533,552	(7,161)	215,526,391	0.08222	17,721,330
80						
81						
82						
83	Utility Total Amortization	258,164,433	(7,161)	258,157,272	0.07690	\$ 19,852,874
84						
85	TOTAL RAM DEPRECIATION / AMORTIZATION				Line 60 + Line 83	\$ 139,332,828
86	LESS: Vehicle Depreciation (A/C 392 above)				Line 58	\$ (3,590,432)
87	LESS: Depreciation & Amortization in Current Revenues				Footnote 2	\$ (94,237,000)
88						
89	RAM Adjustment for Depreciation & Amortization					\$ 41,505,396
90	RAM Adjustment for CIAC Amortization				Schedule G Line 15	\$ (522,481)
91	RAM Adjustment for CIP CT-1 Reg Asset Amortization				HECO-WP-D1-001A	954,000
92	RAM Adjustment for CIS Def Cost Amortization				HECO-WP-D1-001B	1,220,000
93	Total RAM Adjustment for Depreciation & Amortization					\$ 43,156,915
94	Times: Factor for Revenue Taxes				Schedule C Line 5	1.09750
95						
96	RAM DEPRECIATION & AMORTIZATION					\$ 47,364,714

To Sch A1

Footnotes:

- Amounts are recorded (in \$000s), except for the following adjustments
- 1 (see HECO-WP-D2-001):
- |   |             |
|---|-------------|
| Waiau 8 Boiler Ctl's Upgrade                  | \$ (1,075)  |
| Waiau 8 Main Transformer Replace              | (243)       |
| Kahuku Wind Power                             | (7)         |
| W7 Controls Upgrade                           | (424)       |
| Kakaako Makai-Iwilei                          | (4,016)     |
| Kakaako Makai-Kewalo                          | (1,410)     |
| Kakaako Makai-DOT Queen-Cook                  | (1,276)     |
| BPT Tank 133 Improvements                     | (193)       |
| Tenant Improvement Allowance (see Footnote 4) | (13,362)    |
| Total   | \$ (22,006) |
- 2 Depreciation & Amortization in Current Revenues\*:
- |  |                    |
|--|--------------------|
| Total Depreciation                       | Depr/Amort Expense |
| LESS: Vehicle Depreciation (A/C 392)     | \$ 97,297,000      |
| LESS: CIP CT-1 excess depreciation       | (2,292,000)        |
| LESS: EOTP excess depreciation           | (603,000)          |
| ADD: Revised EOTP excess depreciation ** | (1,171,000)        |
| Net Depreciation in Current Revenues     | 1,006,000          |
|  | \$ 94,237,000      |
- \*Amounts are per page 90 of Exhibit 1 to the Parties' Stipulated Settlement Letter dated July 5, 2011 in HECO's 2011 test year rate case (Docket No. 2010-0080).
- \*\*Amount is per page 1 of Exhibit 2, Attachment 3 to the Stipulated Supplement to the Parties' July 5, 2011 Stipulated Settlement Letter with respect to East Oahu Transmission Project Phase 1 Costs, dated February 3, 2012. Depreciation added in EOTP interim was based on 2010 plant adds and the 2010 actual depreciation rates (blended rate in 2010). The 2012 depreciation is based on additional plant adds made in 2011 included in the February 3, 2012 stipulation supplement, offset by the write-down of \$9.5M of costs and the lower depreciation rates in 2012 (full year of the lower depreciation rates).
- 3 Per Accounting records, does not include land amounting to \$43,956,434 as of December 31, 2016.
- 4 Amount represents tenant improvement allowances paid by the lessors and excluded from the RAM calculation.

**HAWAIIAN ELECTRIC COMPANY, INC.**  
**DECOUPLING CALCULATION WORKBOOK**  
**DETERMINATION OF CHANGE IN DEFERRED INCOME TAXES**

Line No.	NARUC Account (a)	Reference (b)	Projected ADIT Change (c)
1	State Tax Depreciation	Schedule F1	9,712,864
2	Effective Federal Tax Rate	HECO-WP-F-001	32.8947%
3	Federal Deferred Tax on State Tax Depreciation		<u>3,195,021</u>
4	Add back State Tax Depreciation	Line 1	(9,712,864)
5	Federal Tax Depreciation	Schedule F1	<u>102,615,920</u>
6	Federal/State Difference		<u>92,903,056</u>
7	Tax Rate on Federal Only Adjustment	HECO-WP-F-001	35%
8	Federal Deferred Tax Adjustment		<u>32,516,070</u>
9	Total Federal Deferred Taxes		<u><u>35,711,091</u></u>
<b>STATE DEFERRED TAXES</b>			
10	State Tax Depreciation	Line 1	9,712,864
11	Effective State Tax Rate	HECO-WP-F-001	6.0150%
12	Total State Deferred Taxes		<u>584,232</u>
13	TOTAL FED AND STATE DEFERRED TAXES		<u><u>36,295,323</u></u>
			To Sch D1

NOTE: In accordance with the tariff, the change in ADIT in the RAM year is based on the temporary book/tax depreciation differences associated with the RAM year plant additions (major capital projects and baseline plant additions). It does not include any estimated ADIT related to the repairs deduction or CIAC on RAM year plant additions.

**HAWAIIAN ELECTRIC COMPANY, INC.**  
**DECOUPLING CALCULATION WORKBOOK**  
**DETERMINATION OF TAX DEPRECIATION**

[illegible]

**NOTE (1)** The Protecting Americans from Tax Hikes (PATH) Act of 2015 extended bonus depreciation for property acquired and placed in service from 2015 through 2019. The bonus depreciation percentage is 50 percent for property placed in service during 2017.

**NOTE (2)** The numbers in columns b, c, d are rounded to the nearest thousand.

**HAWAIIAN ELECTRIC COMPANY, INC.**  
**DECOUPLING CALCULATION WORKBOOK**  
**TAX DEPRECIATION ON MAJOR CAPITAL PROJECTS ADDITIONS**

Line No.	Description	(b)	PUC Docket	Estimated In Service Date	Amount	
	(a)		(c)	(d)	(e)	
1	Assumed Value of 2017 Major Capital Projects Plant Items				\$ 2,735,955	Schedule D3
2	Assumed Value of 2017 Major Capital Projects - CIAC nontaxable					Schedule G2 *
3	Assumed Value of 2017 Major Capital Projects - Total				<u>\$ 2,735,955</u>	
			FED YR 1	FED YR 1	STATE YR 1	STATE YR 1
4	Tax Classification of Major Capital Project Additions	Tax Basis Distribution	DEPR RATE	TAX DEPR	DEPR RATE	TAX DEPR
5	5 yr	2,590,000	60.000%	1,554,000	20.00%	518,000
6	7 yr	-	57.145%	-	14.29%	-
7	15 yr	145,955	52.500%	76,626	5.00%	7,298
8	20 yr		51.875%	-	3.75%	-
9	39 yr					
10	Land					
11	Vehicles					
	Total	<u>\$ 2,735,955</u>		<u>\$ 1,630,626</u>		<u>\$ 525,298</u>
		To Sch F1		To Sch F1		To Sch F1

\* Adjustment only for non-taxable CIAC.

**HAWAIIAN ELECTRIC COMPANY, INC.**  
**DECOUPLING CALCULATION WORKBOOK**  
**CIAC SUMMARY**

Line No.	Description (a)	Reference (b)	Unamortized CIAC (c)	CIAC Amortization (d)
1	12/31/16 Beginning Balance	Schedule G1	\$ (347,826,078)	
2				
3	<u>2017 CIAC Additions:</u>			
4	Baseline 5-Yr Average	Schedule G1	(33,234,662)	
5	Major Projects	Schedule G2	(900,000)	
6	Net Additions		<u>(34,134,662)</u>	
7				
8	<u>2017 CIAC Amortization:</u>			
9	Estimated Amortization	Schedule G3	8,309,481	\$ (8,309,481)
10				
11	12/31/17 Ending Balance		<u>\$ (373,651,259)</u>	(8,309,481)
12			To Sch D1 Line 16	
13	LESS: CIAC Amortization in Current Revenues - NOTE (1)			<u>(7,787,000)</u>
14				
15	RAM Adjustment for CIAC Amortization			<u>\$ (522,481)</u>
				To Sch E Line 90

Note (1) - Per page 90 of Exhibit 1 to the Parties' Stipulated Settlement Letter dated July 5, 2011 in HECO's 2011 test year rate case (Docket No. 2010-0080).

**HAWAIIAN ELECTRIC COMPANY, INC.**  
**DECOUPLING CALCULATION WORKBOOK**  
**BASELINE CAPITAL PROJECTS CIAC ADDITIONS**

Source of CIAC balance and amort.: December Monthly Reports filed (non-confidential basis) with the PUC dated:

Line No.	Description (a)			2/19/2013	2/21/2014	2/26/2015	2/23/2016	2/24/2017
				2012 (b)	2013 (c)	2014 (d)	2015 (e)	2016 (f)
1	CIAC Balance, January 1 (Dec Rpt. pg. 10)			(204,795,271)	(238,510,104)	(258,084,169)	(283,739,660)	(319,727,698)
2	Less: CIAC Amortization (Dec Rpt. pg. 2)			4,895,840	5,652,912	6,147,559	6,771,148	7,597,437
3	CIAC Balance, December 31 (Dec Rpt. pg. 10)			238,510,104	258,084,169	283,739,660	319,727,698	348,444,542
4	Less: Non-Utility CIAC		NOTE (3)	-	-	-	(618,464)	(618,464)
5	Less: Adjusted CIAC Balance, December 31			238,510,104	258,084,169	283,739,660	319,109,234	347,826,078 To Sch G
6	Total Adjusted CIAC Additions	(Sum Line 1, 2 & 5)		38,610,673	25,226,977	31,803,050	42,140,722	35,695,817
7								
8	Less Major Projects:	Dkt No.	Item No.					
9								
10	2008 In-service:							
11	CIP Generating Unit	05-0145	Y49000					
12								
13	2010 In-service:							
14	Kamoku 46kv UG Alt Ph 1 (EOTP)	03-0417	Y48500					
15	K3 Biofuel Co-Firing	2009-0155	P0001577					
16	Kahuku Wind Power - NOTE (1)	2009-0176		NA	NA	NA	NA	NA
17								
18	2011 In-Service:							
19	W8 Boiler Controls Upgrade	2007-0365	P7650000					
20	EOTP Ph. 2 (Subs/Switch Stations)	2010-0062	Y48500	(2,157,239)	(87,994)	(43,725)	(15,232)	(718)
21	W7 Controls Upgrade	2009-0195	P7590000					
22	W8 Main Transformer Replace		P0001399					
23								
24	2012 In-Service:							
25	K1 Condenser Tube Replace	2010-0126	P0000681					
26	BPT Tank 132 Improvements	2010-0286	P0000899					
27	Mobile Radio Replacement	2010-0162	P0001595					
28	Kapolei Substation	2011-0026	Y00127					
29								
30	2013 In-Service:							
31	Pukele 80MVA Tsf #3	2011-0156	P0001494					
32	Kakaako Makai-Iwilei 25kV DL	2009-0042	Y00038					
33	Kalo Substation - Land - NOTE (2)	2008-0070	Y00119	(2,173,999)				
34	North South Road 46kV Line	2008-0070	Y00119					
35								
36	2014 In-Service:							
37	Kalo Substation	2008-0070	Y00119					
38	Kalo Sub 46kV & 12kV Distr	2008-0070	Y00119					
39	Kalo Telecomm	2008-0070	Y00119					
40	Kalo Sub 12kV Work	2008-0070	Y00119					
41	Kakaako Makai-Kewalo 25kV DL	2009-0042	Y00038					
42	Kakaako Makai DOT Queen-Cook	2009-0042	Y00038					(2,825,023)
43	BPT Tank 133 Improvements	2010-0318	P0000900					
44	Pukele 80MVA Tsf #2	2011-0156	P0001492					
45	DOT Airport DSG	2008-0329	P0001370					
46								
47	2016 In-Service:							
48	Pukele 80MVA Tsf #1	2011-0156	P0002264					
49								
50	Total Net CIAC Additions			34,279,435	25,138,983	31,759,325	42,125,490	32,870,076
51								
52	Last Five-Year Average							33,234,662 To Sch G

**GENERAL NOTE:**

The CIAC amounts of the major projects are reflected in the year that they were received. In previous Decoupling filings these amounts were from the respective year's GO7 plant addition annual reports which reports the CIAC in the year the project closed to plant. In the past, the total CIAC additions, which reflect actual contributions received in the year, may not have included the total major project CIAC from the GO7 report to the extent that the CIAC was received in advance, or in multiple payments over a span of more than one year. Source: UI Planner files: Actuals Scenario.

**NOTE (1):**

In Hawaiian Electric Transmittal No. 11-02, Attachment 4.1, page 3 (Revised 5/10/11), filed May 10, 2011, the Company reflected the removal of the Kahuku Wind Power project, due to approval for recovery through the REIP surcharge (Decision and Order and Dissenting Opinion of Leslie H. Kondo, Commissioner, Docket No. 2009-0176, filed on May 12, 2010). However, because these costs were included as part of the 2010 and 2011 plant additions in Hawaiian Electric's 2011 rate case (Docket No. 2010-0080), the Company did not seek to recover these costs through the REIP surcharge (see the Renewable Energy Infrastructure Program ("REIP") - Annual Report, p.2, footnote 3, filed in Docket No. 2007-0416, dated January 31, 2012). The recorded cost of this project is \$2,132,812 as shown on HECO-WP-E-001.

**NOTE (2):**

CIAC received for this project was not reflected in the 2012 and 2013 Decoupling filings as previous filings reported the CIAC amounts of the major projects from the respective year's GO7 plant addition annual report which reports the CIAC in the year the project closed to plant. See NOTE (1).

**NOTE (3):**

Adjustment to remove non-utility project related CIAC from the general ledger balance. Chapin UG Duct Line is a non-utility asset. It is a contributed asset that was given to the Company. It is not being used and there are currently no plans to use it. See Schedule G3, Line 94.

**HAWAIIAN ELECTRIC COMPANY, INC.**  
**DECOUPLING CALCULATION WORKBOOK**  
**MAJOR CAPITAL PROJECT CIAC ADDITIONS**

Line No.	Description (a)	PUC Docket Reference (b)	Estimated In Service Date (c)	Amount (d)
1	<u>2017 Major Project CIAC Additions by Project:</u>			
2	Kakaako Makai DOT Queen-Cook Amount Qualifying for 2017 RAM	Docket No. 2009-0042 (D&O dated 8/7/2009) UI Planner Budget files	Apr-14	900,000
3	Total Major Project CIAC Additions for 2017 RAM (See HECO-WP-G2-001)			<u>\$ 900,000</u> To Sch G & D1



HAWAIIAN ELECTRIC COMPANY, INC.  
DECOUPLING CALCULATION WORKBOOK  
CIAC AMORTIZATION

Line No.	Description	2015 Balance	2016 Amortization	2016 Balance	2017 Amortization
	(a)	(b)	(c)	(d)	(e)
1	<u>CIAC by Vintage:</u>				
2	1981	\$ 30,233	\$ 1,778	\$ 28,455	\$ 1,778
3	1982	96,324	5,351	90,973	5,351
4	1983	201,387	10,599	190,788	10,599
5	1984	207,233	10,362	196,871	10,362
6	1985	274,020	13,049	260,971	13,049
7	1986	406,403	18,473	387,930	18,473
8	1987	814,849	35,428	779,421	35,428
9	1988	1,198,263	49,828	1,148,335	49,828
10	1989	1,027,220	41,089	986,131	41,089
11	1990	5,785,848	222,533	5,563,315	222,533
12	1990 - Land	1,303,408		1,303,408	
13	1991	2,856,954	105,813	2,751,141	105,813
14	1992	2,840,433	94,301	2,546,132	94,301
15	1993	5,818,457	200,637	5,617,820	200,637
16	1994	4,305,754	143,525	4,162,229	143,525
17	1995	3,342,680	107,828	3,234,852	107,828
18	1996	2,628,634	82,145	2,546,489	82,145
19	1997	2,005,866	60,784	1,945,082	60,784
20	1998	2,957,220	86,977	2,870,243	86,977
21	1999	3,336,089	95,317	3,240,772	95,317
22	2000	2,248,309	62,453	2,185,856	62,453
23	2001	2,843,679	76,856	2,766,823	76,856
24	2002	4,036,053	108,212	3,927,841	108,212
25	2003	4,388,138	112,465	4,275,673	112,465
26	2004	3,055,031	76,376	2,978,655	76,376
27	2005	10,185,895	248,436	9,937,459	248,436
28	2006	8,773,464	208,892	8,564,572	208,892
29	2007	9,332,099	217,026	9,115,073	217,026
30	2008	8,602,085	195,502	8,406,583	195,502
31	2009	6,953,554	154,523	6,799,031	154,523
32	2010	13,019,216	283,026	12,736,190	283,026
33	2011	16,752,141	356,429	16,395,712	356,429
34	2012	32,959,161	686,649	32,272,512	686,649
35	2013	21,700,412	442,866	21,257,546	442,866
36	2014	30,163,055	603,261	29,559,794	603,261
37	2015	39,876,789	781,899	39,094,900	781,898
38	2016			16,679,551	327,050
39					
40					
41	<u>CIAC GET Adjustment:</u>				
42	-adj 92-96 GET	(125,574)	(3,924)	(121,650)	(3,924)
43	-adj 97 GET	(48,285)	(1,403)	(44,882)	(1,403)
44	-adj 98 GET	(57,707)	(1,697)	(56,010)	(1,697)
45	-adj 99 GET	(75,922)	(2,189)	(73,733)	(2,189)
46	-adj 00 GET	(73,032)	(2,029)	(71,003)	(2,029)
47	-adj 01 GET	(108,790)	(2,940)	(105,850)	(2,940)
48	-adj 02 GET	(118,208)	(3,111)	(115,095)	(3,111)
49	-adj 03 GET	(160,777)	(4,122)	(156,655)	(4,122)
50	-adj 04 GET	(112,423)	(2,811)	(109,612)	(2,811)
51	-adj 05 GET	(231,075)	(5,636)	(225,439)	(5,636)
52	-adj 06 GET	(506,511)	(12,060)	(494,451)	(12,060)
53	-adj 07 GET	(408,313)	(9,496)	(398,817)	(9,496)
54	-adj 08 GET	(334,225)	(7,596)	(326,629)	(7,596)
55	-adj 09 GET	(311,057)	(8,912)	(304,145)	(8,912)
56	-adj 10 GET	(468,997)	(10,196)	(458,801)	(10,196)
57	-adj 11 GET	(404,538)	(8,607)	(395,931)	(8,607)
58	-adj 12 GET	(509,739)	(10,599)	(499,140)	(10,599)
59	-adj 13 GET	(671,937)	(13,713)	(658,224)	(13,713)
60	-adj 14 GET	(687,581)	(13,752)	(673,829)	(13,752)
61	-adj 15 GET	(952,861)	(18,684)	(934,177)	(18,684)
62	-adj 16 GET			(862,287)	(16,908)
63					
64					
65	<u>In - Kind CIAC:</u>				
66	1988	331,355	13,806	317,549	13,806
67	1989	375,043	15,002	360,041	15,002
68	1990	195,626	7,524	188,102	7,524
69	1991	420,241	15,565	404,676	15,565
70	1992	1,188,648	42,380	1,146,268	42,380
71	1993	1,018,988	35,138	983,850	35,138
72	1994	1,712,025	57,068	1,654,957	57,068
73	1995	3,447,363	111,205	3,336,158	111,205
74	1996	1,796,969	56,155	1,740,814	56,155
75	1997	939,513	28,470	911,043	28,470
76	1998	1,819,388	53,511	1,765,877	53,511
77	1999	1,440,211	41,149	1,399,062	41,149
78	2000	2,974,883	82,638	2,892,247	82,638
79	2001	1,238,940	33,485	1,205,455	33,485
80	2002	2,718,938	71,498	2,647,440	71,498
81	2003	4,124,552	105,758	4,018,794	105,758
82	2004	2,536,095	63,402	2,472,693	63,402
83	2005	4,335,181	105,736	4,229,425	105,736
84	2006	3,891,509	92,655	3,798,854	92,655
85	2007	7,702,686	178,132	7,523,554	178,132
86	2008	1,151,934	28,180	1,123,754	28,180
87	2009	2,123,589	47,191	2,076,398	47,191
88	2010	4,756,036	103,392	4,652,644	103,392
89	2011	5,094,727	108,398	4,986,329	108,398
90	2012	3,889,035	81,022	3,808,013	81,022
91	2013	3,209,208	65,494	3,143,714	65,494
92	2014	1,703,987	34,080	1,669,908	34,080
93	2015	3,216,784	63,074	3,153,710	63,074
94	2015 - Chapin UG Conduit (non-utility)	618,464	-	618,464	-
95	2016			20,497,017	401,502
96					
97	Total CIAC Amortization for 2017 RAM	\$ 319,727,698	\$ 7,597,437	\$ 348,444,542	\$ 8,309,481

To Sch D1 Line 37

**HAWAIIAN ELECTRIC COMPANY, INC.**  
**DECOUPLING CALCULATION WORKBOOK**  
**EARNINGS SHARING CALCULATIONS**  
All Amounts \$000 (Except %)

Line No.	Description (a)	Reference (b)	Ratemaking Basis Return on Equity		
			Operating Income (c)	Rate Base (d)	Rate of Return (e)
1	Reported Operating Income before ratemaking adjustment	Dec 2016 Mo. PUC rpt, pg 2A filed 2/24/17 & HECO-WP-H-001	\$ 137,691	\$ 1,880,758	
2	<u>Ratemaking Adjustments to Line 1:</u>				
2a	Incentive Compensation Expenses (net of tax)	HECO-WP-H-002	3,368		
2b	Discretionary and Other Expenses Not Recoverable (net of tax)	HECO-WP-H-002	922		
2c	Amortization of investment income differential	HECO-WP-H-003	185		
2d	Income tax on items to be replaced by synchronized interest	HECO-WP-H-003	(17,179)		
2e	Remove Accrued Earnings Sharing Refund	HECO-WP-H-005	0		
3	Ratemaking Basis Amounts - Post Tax	Sum Lines 1 & 2	\$ 124,985	\$ 1,880,758	
4	<u>Ratemaking Capitalization</u>		Balances	Ratios	Cost Rate
5	Short-Term Debt (12 mo. Avg)		\$ 43,499	2.01%	0.66%
6	Long-Term Debt (Simple Avg)		\$ 856,436	39.65%	5.09%
7	Hybrid Securities (Simple Avg)		\$ 28,541	1.32%	7.21%
8	Preferred Stock (Simple Avg)		\$ 21,082	0.98%	5.38%
9	Common Equity (Simple Avg)		\$ 1,210,614	56.04%	10.00%
10	Total Capitalization	HECO-WP-H-004	\$ 2,160,172	100.00%	7.78%
11	Line 3 Rate Base Amount			\$ 1,880,758	
12	Weighted Cost of Debt (Sum Lines 5-7)			2.13%	
13	Synchronized Interest Expense			\$ 40,060	
	Income Tax Factor (Note 1)			1.636929121	
13a	Synchronized Interest Expense, net of tax			\$ 24,473	
14	Post Tax Income Available for Preferred & Common (Line 3 - Line 13a)				\$ 100,512
17	Less: Preferred Income Requirement (Line 8 Weighted Cost times Rate Base)				940
18	Income Available for Common Stock				\$ 99,572
19	Ratemaking Equity Investment (Line 9 Ratio times Rate Base)				1,054,023
20	Return on Equity for Decoupling Earnings Sharing (Line 18/Line 19)				9.45%
21	<u>Earnings Sharing Revenue Credits:</u>		Basis Points		
22	Achieved ROE (basis points)		945		
23	Authorized Return (basis points) (D&O 30505 in Dkt No. 2010-0080, filed on June 29, 2012)		1,000		
24	ROE for sharing (basis points)		-		
25	Sharing Grid per RAM Provision		First 100 bp	Next 200 bp	All over 300 bp
26	Distribution of Excess ROE (basis points)		0	0	0
27	Ratepayer Share of Excess Earnings		25%	50%	90%
28	Ratepayer Earnings Share - Basis Points		-	-	-
29	Revenue Credit per Basis Point (Note 2)				\$ 189
30	Earnings Sharing Revenue Credits (thousands)				\$ -

To Sch A Line 5

Footnotes:

1	Composite Federal & State Income Tax Rate	38.91%
	Income Tax Factor ( 1 / 1-tax rate)	1.636929121
2	Ratemaking Equity Investment (line 19)	\$ 1,054,023
	Basis Point = 1/100 of a percent	0.01%
	Earnings Required per Basis Point (thousands)	\$ 105.40
	Times: Income Tax Conversion Factor	1.636929121
	Pretax Income Required per Basis Point (thousands)	\$ 173
	Times: Revenue Tax Conversion Factor	1.0975
	Revenue Requirement per Basis Point (thousands)	\$ 189

**HAWAIIAN ELECTRIC COMPANY, INC.**  
**DECOUPLING CALCULATION WORKBOOK**  
**EARNINGS SHARING CALCULATIONS**  
All Amounts \$000 (Except %)

			AS ORIGINALLY FILED - 2013 Decoupling Filing with Settlement Revised 05-14-13			AS REVISED - 2013 Decoupling Filing		
			Ratemaking Basis Return on Equity			Ratemaking Basis Return on Equity		
Line No	Description	Reference	Operating Income (c)	Rate Base (d)	Rate of Return (e)	Operating Income (c)	Rate Base (d)	Rate of Return (e)
1	Reported Operating Income before ratemaking adjustment	Dec 2012 Mo. PUC rpt, pg 2A filed 2/19/13 & HECO-WP-H-001	\$ 119,924	\$ 1,531,776		\$ 119,924	\$ 1,531,776	
1a	Adjustment to 2012 Interest Expense on Customer Deposit (net of tax) (Note 3)					32		
2	<u>Ratemaking Adjustments to Line 1:</u>							
2a	Incentive Compensation Expenses (net of tax)	HECO-WP-H-002	3,782			3,782		
2b	Discretionary and Other Expenses Not Recoverable (net of tax)	HECO-WP-H-002	868			868		
2c	Amortization of investment income differential	HECO-WP-H-003	194			194		
2d	Income tax on gains to be replaced by synchronized interest	HECO-WP-H-003	(14,210)			(14,210)		
2e	CA Adjustment to Remove Accrued Earnings Sharing Refund		1,158			1,158		
3	Ratemaking Basis Amounts - Post Tax	Sum Lines 1 & 2	\$ 111,714	\$ 1,531,776		\$ 111,746	\$ 1,531,776	
4	<u>Ratemaking Capitalization</u>		Balances	Ratios	Cost Rate	Weighted Cost		
5	Short-Term Debt (12 mo. Avg)		\$ 73,702	4.26%	0.52%	0.02%		
6	Long-Term Debt (Simple Avg)		\$ 878,938	39.10%	5.79%	2.26%		
7	Hybrid Securities (Simple Avg)		\$ 28,104	1.62%	7.33%	0.12%		
8	Preferred Stock (Simple Avg)		\$ 20,802	1.21%	5.44%	0.07%		
9	Common Equity (Simple Avg)		\$ 931,512	53.81%	10.00%	5.38%		
10	Total Capitalization	HECO-WP-H-004	\$ 1,731,115	100.00%		7.65%		
11	Line 3 Rate Base Amount			\$ 1,531,776			\$ 1,531,776	
12	Weighted Cost of Debt			2.40%			2.40%	
13	Synchronized Interest Expense			\$ 38,783			\$ 38,783	
	Income Tax Factor			1.636929121			1.636929121	
13a	Synchronized Interest Expense, net of tax			\$ 22,459			\$ 22,459	
14	Post Tax Income Available for Preferred & Common (Line 3 - Line 13a)				\$ 89,255			\$ 89,287
17	Less: Preferred Income Requirement (Line 8 Weighted Cost times Rate Base)				1,072			1,072
18	Income Available for Common Stock				\$ 88,183			\$ 88,215
19	Ratemaking Equity Investment (Line 9 Ratio times Rate Base)				824,247			824,247
20	Return on Equity for Decoupling Earnings Sharing				10.70%			10.70%
21	<u>Earnings Sharing Revenue Credits:</u>		Basis Points				Basis Points	
22	Achieved ROE (basis points)		1,070				1,070	
23	Authorized Return (basis points)		1,000				1,000	
24	ROE for sharing (basis points)		70				70	
25	Sharing Grid per RAM Provision		First 100 bp	Next 200 bp	AS over 300 bp	Ratepayer Total	First 100 bp	Ratepayer Total
26	Distribution of Excess ROE (basis points)		70	0	0		70	
27	Ratepayer Share of Excess Earnings		25%	50%	90%		25%	
28	Ratepayer Earnings Share - Basis Points		17	-	-	17	18	18
29	Revenue Credit per Basis Point (Note 2)				\$ 148			\$ 148
30	Earnings Sharing Revenue Credits (thousands)				\$ 2,586.19			\$ 2,600.88
31	Additional Earnings Sharing Revenue Credits (thousands)						Additional ESM	\$ 14.485 (a)
32							Interest Rate (Note 4)	1.75% (b)
33							No. of Years (June 2013-May 2017)	4 (c)
34							Additional ESM with Interest	\$ 15.526 (a)*[(1-(b)) <sup>(c)</sup> ] To Sch A Line 5a
Footnotes:								
1	Composite Federal & State Income Tax Rate		38.91%			38.91%		
	Income Tax Factor ( 1 / 1-tax rate)		1.636929121			1.636929121		
2	Ratemaking Equity Investment (line 19)		\$ 824,247			\$ 824,247		
	Basis Point = 1/100 of a percent		0.01%			0.01%		
	Earnings Required per Basis Point (thousands)		\$ 82.42			\$ 82.42		
	Times: Income Tax Conversion Factor		1.636929121			1.636929121		
	Pretax Income Required per Basis Point (thousands)		\$ 135			\$ 135		
	Times: Revenue Tax Conversion Factor		1.0975			1.0975		
	Revenue Requirement per Basis Point (thousands)		\$ 148			\$ 148		
3	The adjustment on line 34 represents additional refunds in the year the ESM was triggered in 2012 plus interest for the period June 2013 through May 2017. In July 2018, the Companies discovered the interest expense accrued for financial statement purposes had erroneously been overstated since May 2012 due to the incorrect programming of a report developed when the Customer Information System was implemented. The report miscalculated accrued interest on released deposits and for deposits that had been transferred to the new Customer Information System. The misstatement was deemed immaterial and no prior period adjustment was warranted for financial reporting purposes. However, it resulted in an understatement of the Earnings Sharing Mechanism in the ESM in this year. See further discussion at HECO-WP-H1-001.							
4	In Decision and Order No. 31908 in Docket No. 2013-0141, filed on February 7, 2014, the Commission ordered the Company to utilize the short term debt rate as established in deriving the consolidated cost of capital in the last full rate case in computing interest on the outstanding RBA balance. The Commission approved the RBA tariff amendments for the Company implementing the revised interest rate effective as of March 1, 2014 in Decision and Order No. 32001 filed March 28, 2014. As a result, the interest rate used to compute the RBA interest was changed from 6% to 1.75% as of March 1, 2014. This interest rate is used to calculate interest on the delayed refund to customers.							

**HAWAIIAN ELECTRIC COMPANY, INC.**  
**DECOUPLING CALCULATION WORKBOOK**  
**PUC-ORDERED ADJUSTMENTS**

Line No.	Description	Reference		
	(a)	(b)	(c)	(d)

This Schedule has not been developed yet and will be developed only when/as needed.

**HAWAIIAN ELECTRIC COMPANY, INC.**  
**DECOUPLING CALCULATION WORKBOOK**  
**DETERMINATION OF RAM CAP**

<u>Line No.</u>	<u>Description</u> (a)	<u>Reference</u> (b)	<u>Amount \$000</u> (c)
1	2015 Target Revenues subject to escalation	3/31/16 Decoupling, Sch J	637,351
2	2016 RAM Cap Increase excluding Exceptional & Other Matters	3/31/16 Decoupling, Sch J	9,560
3	2016 Target Revenues subject to escalation		646,911
4	2017 GDP Price Index	Sch C	2.00%
5	2017 RAM Cap Increase excluding Exceptional & other Matters	Line 3 x Line 4	12,938
6	RAM Cap for 2016 RAM Revenue Adjustment	3/31/16 Decoupling, Sch J	84,804
7	RAM Cap for 2017 RAM Revenue Adjustment	Line 5 + Line 6	97,742
			To Sch A1

**HAWAIIAN ELECTRIC COMPANY, INC.**  
**DECOUPLING CALCULATION WORKBOOK**  
**EXCEPTIONAL & OTHER MATTERS**

Line No.	Description (a)	Reference (b)	Amount \$000 (c)
1	CIP CT-1 Reg Asset	Schedule K1, pg. 1	\$ 1,238.2
2	CIS Deferred Cost	Schedule K1, pg. 2	<u>2,150.8</u>
3	2017 Revenue Adjustment for Exceptional & Other Matters		<u>\$ 3,389.0</u> To Sch A1

Note 1 **Exceptional and Other Matters:**

See Order No. 32735, filed March 31, 2015, paragraph 107, page 94 - 95:

"The Basis used in determining the RAM Cap shall be adjusted to exclude or otherwise appropriately account for adjustments for the recovery of revenues for previously explicitly stipulated and approved exceptional matters or other matters specifically ordered by the commission, which shall, in any event, be recovered fully without respect to any limitations resulting from application of the RAM Cap."

Footnote 149 stipulates that such applicable matters include adjustments accounting for CT-1 costs (for Hawaiian Electric) and CIS costs (for all of the Hawaiian Electric Companies) as provided in a stipulated agreement approved by the Commission as amended in Order No. 31126 in Docket No. 2008-0083.

**HAWAIIAN ELECTRIC COMPANY, INC.**  
**DECOUPLING CALCULATION WORKBOOK**  
**EXCEPTIONAL & OTHER MATTERS - CIP CT-1**  
\$ in thousands

Line No.	Description (a)	Reference (b)	HECO 2011 Test Year Rate Base		HECO 2017 RAM Rate Base (Note 1)		
			Beg. Balance 12/31/2010 (c)	Budgeted Balance 12/31/2011 (d)	Recorded at 12/31/2016 (e)	RAM Projected Amounts (f)	Estimated at 12/31/2017 (g)
1	CIP CT-1 Regulatory Asset	HECO-WP-D1-001A	\$ -	\$ -	\$ 2,306	\$ (954)	\$ 1,352
2	CIP CT-1 ADIT		-	-			
3	28598 - CIP Interest	Note 2	-	-	(664.60)	275	(390)
4	Adjustment	HECO-WP-D4-003/ HECO-WP-K1-001	-	-	229	(95)	134
5	Total	Sum Line 1 - Line 4	\$ -	\$ -	\$ 1,871	\$ (774)	\$ 1,097
6	2017 Average Balance						\$ 1,483.9
7	Change in Rate Base						\$ 1,483.9
8	Pretax Rate of Return	Schedule D					11.74%
9	Pretax Return Requirement	Line 7 x Line 8					\$ 174
10	CIP CT-1 Reg Asset Amortization	HECO-WP-D1-001A					954
11		Sum Line 9 + Line 10					\$ 1,128
12	Revenue Tax Factor (1/(1-8.885%))	Schedule D					1.0975
13	Return Requirement	Line 11 x Line 12					\$ 1,238.2
							To Sch K

Note 1 See Order No. 32735, paragraph 107, Page 94 - 95, filed March 31, 2015, in which the commission noted that the basis used in determining the RAM Cap shall be adjusted to exclude or otherwise appropriately account for adjustments for the recovery of revenues for previously explicitly stipulated and approved exceptional matters or other matters specifically ordered by the commission, which shall, in any event, be recovered fully without respect to any limitations resulting from application of the RAM Cap. Accordingly, adjustments for CT-1 costs (for Hawaiian Electric) and CIS costs (for all of the Hawaiian Electric Companies) as provided in a stipulated agreement approved by the commission as amended in Order No. 31126 in Docket No. 2008-0083 are being treated as Exceptional & Other Matters not subject to the RAM Cap.

Note 2 #28598 - CIP Interest

	Reference	Federal	State	Total
Balance at 12/31/16	HECO-WP-D4-001	(561,860)	(102,740)	(664,600)
Monthly Amortization:				
Depreciation	HECO-WP-D1-001A, Page 2	20,944	20,944	
AFUDC Debt	HECO-WP-D1-001A, Page 2	17,647	17,647	
AFUDC Full Debt	HECO-WP-D1-001A, Page 2	20,308	20,308	
Total Monthly Amortization		58,898	58,898	
Number of Months		12	12	
Annual Amortization		706,782	706,782	
Tax Rate	Schedule F	32.8947%	6.0150%	
2017 Deferred Taxes		232,494	42,513	275,007
Balance at 12/31/17		(329,366)	(60,227)	(389,593)

**HAWAIIAN ELECTRIC COMPANY, INC.**  
**DECOUPLING CALCULATION WORKBOOK**  
**EXCEPTIONAL & OTHER MATTERS - CIS**  
\$ in thousands

Line No.	Description (a)	Reference (b)	HECO 2011 Test Year Rate Base		HECO 2017 RAM Rate Base (Note 1)		
			Beg. Balance 12/31/2010 (c)	Budgeted Balance 12/31/2011 (d)	Recorded at 12/31/2016 (e)	RAM Projected Amounts (f)	Estimated at 12/31/2017 (g)
1	CIS Def Cost	HECO-WP-D1-001B	\$ -	\$ -	10,266	(1,220)	9,046
2	CIS ADIT		-	-			
3	28532 - CIS Project	Note 2	-	-	(3,758)	446	(3,311)
4	Adjustment	HECO-WP-D4-003/ HECO-WP-K1-001	-	-	190	(23)	168
5	Total	Sum Line 1 - Line 4	\$ -	\$ -	\$ 6,698	\$ (796)	\$ 5,903
6	2017 Average Balance						\$ 6,300.6
7	Change in Rate Base						\$ 6,300.6
8	Pretax Rate of Return	Schedule D					11.74%
9	Pretax Return Requirement	Line 7 x Line 8					\$ 739.7
10	CIS Def Cost Amortization	HECO-WP-D1-001B					\$ 1,220.0
11		Sum Line 9 + Line 10					\$ 1,959.7
12	Revenue Tax Factor (1/(1-8.885%))	Schedule D					1.0975
13	Return Requirement	Line 11 x Line 12					\$ 2,150.8
							To Sch K

Note 1 See Order No. 32735, paragraph 107, Page 94 - 95, filed March 31, 2015, in which the commission noted that the basis used in determining the RAM Cap shall be adjusted to exclude or otherwise appropriately account for adjustments for the recovery of revenues for previously explicitly stipulated and approved exceptional matters or other matters specifically ordered by the commission, which shall, in any event, be recovered fully without respect to any limitations resulting from application of the RAM Cap. Accordingly, adjustments for CT-1 costs (for Hawaiian Electric) and CIS costs (for all of the Hawaiian Electric Companies) as provided in a stipulated agreement approved by the commission as amended in Order No. 31126 in Docket No. 2008-0083 are being treated as Exceptional & Other Matters not subject to the RAM Cap.

Note 2 #28532 - CIS Project costs

	Reference	Federal	State	Total
1	Balance at 12/31/16 3/31/16 Decoupling, Sch K1	(3,177,007)	(580,938)	(3,757,947)
2	2017 Tax Amortization HECO-WP-K1-002	-	-	-
3	State Tax Deduction Line 5 for State	-	-	-
4	Tax Rate HECO-WP-F-001	35.000%	6.0150%	
5	2017 Deferred Taxes (Line 2 + Line 3) x Line 4	-	-	-
6	Book Amortization HECO-WP-K1-002	1,147,497	1,147,497	
7	Tax Rate Schedule F	32.8947%	6.0150%	
8	2017 Deferred Taxes Line 6 x Line 7	377,468	89,022	448,488
9	Balance at 12/31/17 Line 1 + Line 5 + Line 8	(2,799,542)	(511,916)	(3,311,459)



Hawaiian Electric Company, Inc.  
Sales Forecast for June 2017 to May 2018  
in GWh

	2017							2018					Total
	<u>Jun</u>	<u>Jul</u>	<u>Aug</u>	<u>Sep</u>	<u>Oct</u>	<u>Nov</u>	<u>Dec</u>	<u>Jan</u>	<u>Feb</u>	<u>Mar</u>	<u>Apr</u>	<u>May</u>	
R	117.2	127.3	131.5	127.5	129.1	120.4	123.1	129.5	109.3	115.7	110.6	116.1	1,457.3
G	25.6	26.8	27.1	26.3	28.0	25.6	26.3	24.6	23.3	25.7	25.2	27.1	311.6
J	152.9	163.0	165.1	162.5	164.8	155.1	154.6	149.5	146.8	153.0	153.1	162.7	1,883.1
P	239.0	259.5	268.9	256.8	263.8	246.7	244.8	239.5	225.2	241.7	240.3	251.0	2,977.2
F	2.7	3.0	2.9	3.0	3.0	2.7	3.0	3.1	2.7	3.2	2.9	3.0	35.2
Total	537.4	579.6	595.5	576.1	588.7	550.5	551.8	546.2	507.3	539.3	532.1	559.9	6,664.4

Source: Hawaiian Electric Company, Inc. Sales Forecast Update completed in October 2016.

Hawaiian Electric Company  
Energy Delivery Methodology Comparison

				A	B	C = A - B
Line	Account Group	Ind		Current Method	Old Method	Difference
1	G10	BO	Billable Incidental Electric Revenue	-	-	-
2	G20	NE	Non-billable O&M Expense other than Supervision	4,216	3,061	1,154
3	G30	NE	Non-billable O&M Expense other than Supervision	11,479,318	15,775,456	(4,296,138)
4		BE	Billable O&M Expense	384,570	193,100	191,470
5		NS	Non-billable O&M Expense Supervision	273,186	423,401	(150,215)
6	G40	NN	Non-Regulated Expense	21	3,736	(3,715)
7		BN	Billable Non-Regulated Revenue & Expense	-	-	-
8	G50	NI	Non-billable Install (Capital)	33,485,323	26,979,333	6,505,990
9		NR	Non-billable Removal	2,472,763	4,665,884	(2,193,122)
10		BR	Billable Removal	334	786	(452)
11	G60	BE	Billable O&M Expense	112,868	91,976	20,892
12		BC	Billable Clearing	139,900	3,574	136,325
13		BI	Billable Install	77,461	134,943	(57,482)
14		BP	Billable Preliminary Engineering	23,125	45,056	(21,930)
15		BR	Billable Removal	2,245	3,024	(779)
16	G70	ND	Non-billable Deferred	12,037	80,924	(68,888)
17		BT	Billable Temporary Facilities	159,432	222,542	(63,110)
18	G80	NC	Non-billable Clearing	-	-	-
19		NP	Non-billable Preliminary Engineering	-	-	-
20	G90	BD	Billable Deferred	-	-	-
21			Totals	48,626,797	48,626,797	(0)
22			O&M expense items (Line 3 + Line 5)			(4,446,354)

Note 1: The total 2016 O&M impact of the change in on-cost clearing allocation amount is calculated as follows:

Energy Delivery (ED) impact	Line 22	(4,446,354)
Power Supply (PS) impact	HECO-WP-A1-001 p 2, Line 21	(3,591,871)
		(8,038,224)
Revenue Tax Factor	Schedule C	1.0975
Adjustment for Change in On-cost Clearing Allocation		(8,821,951)
		To Sch A1

Hawaiian Electric Company  
Power Supply Methodology Comparison

				A	B	C = A - B
Line	Account Group	Ind		Current Method	Old Method	Difference
1	G10	BO	Billable Incidental Electric Revenue	-	-	-
2	G20	NE	Non-billable O&M Expense other than Supervision	1,418,168	741,747	676,421
3	G30	NE	Non-billable O&M Expense other than Supervision	6,711,297	10,302,463	(3,591,166)
4		BE	Billable O&M Expense	-	-	-
5		NS	Non-billable O&M Expense Supervision	844	1,549	(704)
6	G40	NN	Non-Regulated Expense	-	71	(71)
7		BN	Billable Non-Regulated Revenue & Expense	-	-	-
8	G50	NI	Non-billable Install (Capital)	4,407,431	1,385,489	3,021,942
9		NR	Non-billable Removal	281,844	309,087	(27,242)
10		BR	Billable Removal	-	-	-
11	G60	BE	Billable O&M Expense	43,656	104,932	(61,275)
12		BC	Billable Clearing	-	-	-
13		BI	Billable Install	1,989	4,039	(2,050)
14		BP	Billable Preliminary Engineering	14,404	30,252	(15,848)
15		BR	Billable Removal	-	-	-
16	G70	ND	Non-billable Deferred	3	8	(6)
17		BT	Billable Temporary Facilities	-	-	-
18	G80	NC	Non-billable Clearing	-	-	-
19		NP	Non-billable Preliminary Engineering	-	-	-
20			Totals	12,879,636	12,879,636	(0)
21			O&M expense items (Line 3 + Line 5)			(3,591,871)

**HAWAIIAN ELECTRIC COMPANY, INC.**  
**DECOUPLING CALCULATION WORKBOOK**  
**DETERMINATION OF TOTAL RAM REVENUE ADJUSTMENT ALLOWED**  
**CORRECTION OF 2016 DECOUPLING FILING**

			2016 Decoupling Filing	
Line No.	Description	Reference	Amount	
	(a)			
RAM REVENUE ADJUSTMENT DETERMINED ACCORDING TO EXISTING TARIFFS AND PROCEDURES			Note 4	
			As Filed	As Corrected
1	O&M RAM	Schedule C	\$ 18,724,148	\$ 18,724,148
2	Rate Base RAM - Return on Investment	Schedule D	\$ 54,812,505	\$ 54,812,505
3	Depreciation & Amortization RAM Expense	Schedule E	\$ 40,425,560	\$ 40,425,560
4	Total RAM Revenue Adjustment		\$ 113,962,213	\$ 113,962,213
5	Less: Adjustment for Change in On-cost Clearing Allocation	Note 3	\$ (6,033,497)	\$ (6,058,964)
6	Total Adjusted RAM Revenue Adjustment		\$ 107,928,716	\$ 105,903,249
RAM REVENUE ADJUSTMENT CAP				
7	RAM Cap for 2016 RAM Revenue Adjustment	Schedule J	\$ 84,804,271	\$ 84,804,271
8	Plus: Exceptional and Other Matters	Schedule K	\$ 3,591,069	\$ 3,591,069
9	2016 Cap - Total RAM Revenue Adjustment (Note 2)		\$ 88,395,340	\$ 88,395,340
10	Total RAM Revenue Adjustment Allowed (Note 1)	Lesser of Line 4 or Line 7	\$ 88,395,340	\$ 88,395,340
			To Sch A	To Sch A

- Note 1** RAM Revenue Adjustment Allowed:  
See Order No. 32735, filed March 31, 2015, paragraph 106, page 94:  
"The RAM Revenue Adjustment to be applied to determine effective Target Revenues will be the lesser of (a) the RAM Revenue Adjustment determined according to existing tariffs and procedures or (b) a RAM Revenue Adjustment Cap ("RAM Cap) to be calculated as specified."
- Note 2** Total RAM Cap:  
See Order No. 32735, filed March 31, 2015, paragraph 110, page 96:  
"The RAM Cap will apply to the entire RAM Revenue Adjustment including the O&M RAM, Rate Base RAM (including Major Capital Projects and Baseline Projects), and the Depreciation and Amortization RAM."
- Note 3** Order No. 32866, par. 18 required the Company to adjust its 2015 RAM Revenue Adjustment to reflect the O&M expense reduction impact associated with the change in on-cost clearing allocation identified by the Company. The adjustment made to the 2015 RAM revenue adjustment was based on the 2014 O&M expense impact of the change in on-cost clearing allocation. In calculating the 2016 RAM Cap, prior year's adjustment was incorporated in 2015 target revenues that has been escalated to compute the 2016 RAM Cap (See Schedule J). In calculating the 2016 RAM revenue adjustment determined according to existing tariffs and procedures, the adjustment has been updated to reflect the 2015 O&M impact of the change in on-cost clearing allocation. See HECO-WP-A1-001 for the calculation.

- Note 4** Adjustments to the 2016 Decoupling filing on-cost clearing allocation calculation were identified in 2017 and corrected. The 2016 Schedule A1 and HECO-WP-A1-001 were corrected and included as HECO-WP-A1-002 for reference. Revisions had no impact to the 2016 Decoupling filing because the RAM Revenue Adjustment Cap was utilized in determining the Total RAM Revenue Adjustment Allowed.

2016 Decoupling Filing	
As Filed	As Corrected

**Note 1:** The total 2015 O&M impact of the change in on-cost clearing allocation amount is calculated as follows:

VP-A1-002 p 3,  
Line 21

(8,058,964)  
1.0975  
To WP-A1-002, page 1

Hawaiian Electric Company  
Power Supply Methodology Comparison

2016 Decoupling Filing
As Filed
As Corrected

		A		B		C = A - B		Revised		Change	
Line	Account Group	Ind	Current Method	Old Method	Difference	Current	Qld	Difference	Current	Qld	Difference
1	G10	BO									
2	G20	NE	970,859	712,225	258,634	970,820	712,188	258,633	39	38	1
3	G30	NE	7,701,733	9,833,288	(2,131,555)	7,701,505	9,832,677	(2,131,172)	227	611	(383)
4		BE	-	-	-	-	-	-	-	-	-
5		NS	1,740	3,579	(1,840)	1,740	3,579	(1,840)	-	-	-
6	G40	NN	0	29	(28)	0	30	(30)	0	(1)	1
7		BN	-	-	-	-	-	-	-	-	-
8	G50	NI	3,017,684	1,554,677	1,463,008	3,017,879	1,555,130	1,462,749	(195)	(454)	259
9		NR	806,045	333,130	472,915	806,116	333,330	472,786	(71)	(200)	129
10		BR	-	-	-	-	-	-	-	-	-
11	G60	BE	45,196	98,620	(53,424)	45,195	98,610	(53,415)	1	10	(9)
12		BC	-	-	-	-	-	-	-	-	-
13		BI	3,672	6,497	(2,826)	3,672	6,497	(2,826)	-	-	-
14		BP	5,036	9,171	(4,135)	5,038	9,171	(4,135)	-	-	-
15		BR	-	-	-	-	-	-	-	-	-
16	G70	ND	-	748	(748)	1	751	(749)	(1)	(3)	2
17		BT	-	-	-	-	-	-	-	-	-
18	G80	NC	-	0	(0)	-	-	-	-	0	(0)
19		NP	-	-	-	-	-	-	-	-	-
20	Totals		12,551,964	12,551,964	(0)	12,551,964	12,551,964	0	0	0	(0)

O&M expense items (Line 3 + Line 5)

(2,133,395)

(2,133,012)

Hawaiian Electric Company, Inc.  
Adjustment For Prior Year RBA Accrual  
Recovery of 12/31/14 RBA Balance

		2016				
		January	February	March	April	May
Billed RBA Revenues	Note 1	10,899,565	11,222,564	10,390,022	11,575,414	10,982,716
Net Unbilled Revenues	Note 1	389,777	(549,145)	690,937	(348,785)	828,007
Total billed + Unbilled		11,289,343	10,673,419	11,080,958	11,226,629	11,810,723
x % Share for RBA	Note 2	45.0537%	45.0537%	45.0537%	45.0537%	45.0537%
RBA Revenues (Recovery of 12/31/14 RBA balance)		5,086,272	4,808,775	4,992,387	5,058,017	5,321,173
		← Schedule B2 →				
Less: Revenue Taxes	0.08885	(451,915)	(427,260)	(443,574)	(449,405)	(472,786)
RBA Revenues (Recovery of 12/31/14 RBA balance), net of Revenue Taxes		4,634,357	4,381,515	4,548,813	4,608,612	4,848,387
		← Schedule B →				

\* Differences are due to rounding

Note 1: RBA rate adjustment revenues per the Billed reports and Unbilled reports include RBA revenues and RAM revenues. Therefore, an allocation % is utilized to determine RBA revenues.

Note 2: RBA Rate Adjustment Allocation for June 1, 2015 - May 31, 2016 is per Transmittal No. 15-03 (Decoupling) - RBA Rate Adjustment (Filed June 3, 2015), Schedule A, Note (1).

Hawaiian Electric Company, Inc.  
Adjustment For Prior Year RBA Accrual  
Recovery of 12/31/15 RBA Balance

		2016						
		June	July	August	September	October	November	December
Billed RBA Revenues	Note 1	12,034,487	11,868,072	13,100,432	12,789,669	12,581,092	11,476,932	11,805,176
Net Unbilled Revenues	Note 1	(483,747)	715,342	68,265	(345,866)	(168,204)	(96,135)	(96,655)
Total billed + Unbilled		11,550,740	12,583,413	13,168,697	12,443,803	12,412,888	11,380,797	11,708,520
x % Share for RBA	Note 2	36.0364%	36.0364%	36.0364%	36.0364%	36.0364%	36.0364%	36.0364%
RBA Revenues (Recovery of 12/31/15 RBA balance)		4,162,467	4,534,605	4,745,520	4,484,294	4,473,154	4,101,226	4,219,325
		Schedule B2						
Less: Revenue Taxes	0.08885	(369,835)	(402,900)	(421,639)	(398,430)	(397,440)	(364,394)	(374,887)
RBA Revenues (Recovery of 12/31/15 RBA balance), net of Revenue Taxes		3,792,632	4,131,705	4,323,881	4,085,864	4,075,714	3,736,832	3,844,438
		Schedule B						

\* Differences are due to rounding

Note 1: RBA rate adjustment revenues per the Billed reports and Unbilled reports include both RBA and RAM revenues. Therefore, an allocation % is utilized to determine RBA revenues.

Note 2: RBA Rate Adjustment Allocation for June 1, 2016 - May 31, 2017 is per Transmittal No. 16-01 (Decoupling) - RBA Rate Adjustment (Filed March 31, 2016), Schedule A, Note (1).



HECO-WP-B-002  
HAWAIIAN ELECTRIC COMPANY, INC.  
FEB 2016 ADJUSTMENT - CUSTOMER BILLING ADJUSTMENTS DUE TO P TO J RATE CHANGE

REVENUE BALANCING ACCOUNT - REVENUE TRACKER

AS PREVIOUSLY STATED

	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-16
L1 Monthly Target Revenue	41,764,635	46,598,907	45,101,204	48,532,827	48,047,584	51,226,633	52,792,780	50,702,234	51,284,900	48,247,991	48,247,991	47,308,677
L2 Recorded Adjusted Revenue	38,966,462	42,716,768	42,125,471	43,333,632	41,994,944	47,281,491	49,462,250	47,377,603	45,860,541	46,029,249	45,122,645	43,233,334
L3 Target vs. Actual Revenue	2,798,173	3,882,139	2,975,733	5,199,195	6,052,640	3,945,142	3,330,530	3,324,631	5,424,359	2,218,742	3,125,346	4,075,343
L4 Reversal of Previous Year Accrual	(4,873,416)	(5,192,949)	(5,327,198)	(5,401,784)	(5,301,934)	(5,301,934)	(5,377,633)	(5,375,270)	(5,170,653)	(5,072,650)	(4,877,839)	(4,834,357)
L5 Net RBA Change	(2,077,243)	(1,312,830)	(2,351,465)	(342,569)	2,387,484	(1,356,792)	(2,246,103)	(2,050,639)	3,14,286	(2,852,968)	(1,752,293)	(559,014)
L6 Beginning RBA Balance	58,179,894	56,170,978	54,910,778	52,627,239	52,394,205	54,740,397	53,446,938	51,234,324	49,251,629	49,610,143	48,600,320	45,068,941
L7 End Balance Before Interest	56,102,651	54,856,148	52,559,314	52,344,650	54,691,689	53,383,605	51,199,813	49,184,956	48,757,235	48,045,027	47,374,083	44,529,927
L8 Balance Subject to Interest	34,909,178	33,913,845	32,826,740	32,033,118	32,681,896	31,026,399	31,964,428	30,672,881	30,183,944	29,435,418	28,055,078	27,374,083
L9 Interest	50,907	49,458	47,872	46,715	47,661	48,164	46,615	44,731	44,018	42,927	40,914	39,921
L10 Ending RBA Balance	56,153,558	54,907,604	52,607,186	52,291,365	54,739,350	53,431,969	51,246,428	49,228,418	48,610,143	46,800,162	45,068,941	44,569,848

Total Billing  
Adjustment  
(11,204)

Target vs Actual Difference:  
Recorded Adjusted Revenues - Unadjusted  
Billing Adjustments  
Revised Revenues  
Target

Recorded Adjusted Revenues - Unadjusted	38,966,462	42,716,768	42,125,471	43,333,632	41,994,944	47,281,491	49,462,250	47,377,603	45,860,541	46,029,249	45,122,645	43,233,334
Billing Adjustments	(1,883)	(1,928)	(1,771)	(1,622)	(1,558)	(1,483)	(960)	(960)	(960)	(960)	(960)	(960)
Revised Revenues	38,966,579	42,714,860	42,123,700	43,332,010	41,993,386	47,280,008	49,461,290	47,376,643	45,860,541	46,028,289	45,121,685	43,232,374
Target	41,764,635	46,598,907	45,101,204	48,532,827	48,047,584	51,226,633	52,792,780	50,702,234	51,284,900	48,247,991	48,247,991	47,308,677
	2,798,056	3,882,047	2,975,504	5,200,817	6,054,198	3,946,025	3,331,490	3,324,631	5,424,359	2,218,742	3,125,346	4,075,343

AS REVISED

	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-16
L1 Monthly Target Revenue	41,764,635	46,598,907	45,101,204	48,532,827	48,047,584	51,226,633	52,792,780	50,702,234	51,284,900	48,247,991	48,247,991	47,308,677
L2 Recorded Adjusted Revenue	38,966,579	42,714,860	42,123,700	43,332,010	41,993,386	47,280,008	49,461,290	47,376,643	45,860,541	46,028,289	45,121,685	43,232,374
L3 Target vs. Actual Revenue	2,798,056	3,882,047	2,975,504	5,200,817	6,054,198	3,946,025	3,331,490	3,324,631	5,424,359	2,218,742	3,125,346	4,075,343
L4 Reversal of Previous Year Accrual	(4,873,416)	(5,192,949)	(5,327,198)	(5,401,784)	(5,301,934)	(5,301,934)	(5,377,633)	(5,375,270)	(5,170,653)	(5,072,650)	(4,877,839)	(4,834,357)
L5 Net RBA Change	(2,077,360)	(1,310,902)	(2,349,694)	(340,967)	2,389,042	(1,355,308)	(2,246,103)	(2,050,639)	3,14,286	(2,852,968)	(1,752,293)	(559,014)
L6 Beginning RBA Balance	58,179,894	56,172,960	54,914,592	52,632,828	52,311,422	54,749,378	53,457,209	51,245,565	49,253,080	49,621,404	48,611,591	45,100,222
L7 End Balance Before Interest	56,104,534	54,861,957	52,564,698	52,351,861	54,700,464	53,394,070	51,210,045	49,184,956	48,777,276	48,068,496	47,341,208	44,541,268
L8 Balance Subject to Interest	34,909,178	33,915,585	32,829,610	32,037,028	32,686,780	31,032,418	31,970,918	30,679,548	30,190,818	29,442,295	28,061,963	27,380,975
L9 Interest	50,908	49,460	47,877	46,721	47,668	48,172	46,624	44,741	44,028	42,937	40,924	39,931
L10 Ending RBA Balance	56,155,442	54,911,417	52,612,775	52,298,582	54,748,132	53,442,242	51,257,669	49,239,667	48,621,404	46,811,433	45,100,222	44,541,139

Total RBA  
Adjustment  
11,204

Revised Adjustment to Revenue  
RBA Adjustment Recorded to Revenue  
Adjustment to Revenue

Revised Adjustment to Revenue	2,796,056	3,882,047	2,975,504	5,200,817	6,054,198	3,946,025	3,331,490	3,324,631	5,424,359	2,218,742	3,125,346	4,075,343
RBA Adjustment Recorded to Revenue	2,796,173	3,880,119	2,973,733	5,019,195	6,052,640	3,945,142	3,330,530	3,324,631	5,424,359	2,218,742	3,125,346	4,075,343
Adjustment to Revenue	1,883	1,928	1,771	1,622	1,558	1,483	960	960	960	960	960	960

Note [1]

In connection with Decision and Order No. 31908 on Schedule A of the Decoupling Investigation, issued on February 7, 2014, the Company received approval on April 28, 2014, from the Internal Revenue Service to change its tax treatment of RBA revenues from the book accrual method of revenue balancing account ("RBA") revenue recognition to a recognition method based on when rates are adjusted and revenues are collected, effective January 1, 2014. Accordingly, starting with May 2014, interest is calculated based on a net-of-income tax RBA balance, and the following income tax factor is used in the calculation.

$$\text{Income Tax Factor} = (1 / (1 - \text{tax rate}))$$

Note [2]

Totals may not add exactly due to rounding.

Note [3]

The Company recorded an adjustment to the RBA related to a customer billing adjustment due to a P to J rate change that were processed in February 2016. During the regular review period performed by Billing, it was determined that a Schedule P customer was billed under an incorrect rate schedule based on recent kWh usage. The Company recalculated the RBA based on the billing adjustment in the prior months incurred. No interest impact was calculated as the adjustment did not meet the interest recalculation threshold of \$50,000 per the Revenue Balancing Account provision tariff.

HECO-WP-B-003  
HAWAIIAN ELECTRIC COMPANY, INC.  
FEB 2016 ADJUSTMENT - MISCELLANEOUS CUSTOMER BILLING ADJUSTMENTS

REVENUE BALANCING ACCOUNT - REVENUE TRACKER

AS PREVIOUSLY STATED	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15
L1 Monthly Target Revenue	44,129,429	42,712,929	45,951,776	48,725,408	50,451,219	52,004,449	49,933,476	50,508,746	47,517,340	47,517,340	48,598,907	41,764,635
L2 Recorded Adjusted Revenue	40,445,741	39,888,701	41,326,526	43,277,375	45,900,584	48,563,855	45,458,699	46,193,858	43,033,461	42,808,961	41,131,344	38,968,462
L3 Target vs. Actual Revenue	3,683,688	2,824,228	4,625,250	5,448,033	4,550,635	3,440,594	4,475,777	4,314,890	4,483,879	4,709,379	5,467,563	2,796,173
L4 Reversal of Previous Year Accrual	(3,910,640)	(3,873,501)	(4,160,513)	(5,518,592)	(5,956,735)	(6,117,873)	(6,024,188)	(6,133,236)	(5,514,770)	(5,430,235)	(5,141,776)	(4,873,416)
L5 Net RBA Change	(228,952)	(1,049,273)	(494,737)	(70,559)	(1,006,100)	(677,079)	(82,267,427)	(1,818,346)	(1,030,891)	(721,890)	323,787	(2,077,243)
L6 Beginning RBA Balance	64,830,562	64,700,876	63,690,874	64,212,547	64,199,163	62,860,842	62,267,427	60,882,747	59,252,647	58,514,387	57,881,569	56,179,694
L7 End Balance Before Interest	64,603,610	63,651,603	64,155,611	64,141,988	62,793,063	62,183,763	60,754,480	59,076,721	58,174,910	57,333,175	56,115,358	54,102,651
L8 (L6 + L7) * 2 or (L8 + L7) * 2 * [1]	129,207,220	127,303,206	128,311,222	128,283,976	126,986,126	124,367,526	121,508,967	118,153,442	116,349,820	114,666,350	113,230,716	108,205,302
L9 Balance Subject to Interest	94,379	93,590	96,936	97,175	96,568	95,701	94,785	93,399	92,287	91,340	90,607	89,907
L10 Ending RBA Balance	64,697,989	63,745,193	64,212,547	64,199,163	62,849,631	62,239,464	60,774,801	59,083,311	58,227,197	57,784,931	56,166,896	54,153,558

Target vs Actual Difference:  
Recorded Adjusted Revenues - Unadjusted  
Billing Adjustments  
Revised Revenues  
Target

40,445,741	39,888,701	41,326,526	43,277,375	45,900,584	48,563,855	45,458,699	46,193,858	43,033,461	42,808,961	41,131,344	38,968,462
40,445,741	39,888,701	41,326,526	43,277,375	45,900,584	48,563,855	45,458,699	46,193,858	43,033,461	42,808,961	41,131,344	38,968,462
3,683,688	2,824,228	4,625,250	5,448,033	4,550,635	3,440,594	4,475,777	4,314,890	4,483,879	4,709,379	5,467,563	2,796,173

AS REVISED

L1 Monthly Target Revenue	44,129,429	42,712,929	45,951,776	48,725,408	50,451,219	52,004,449	49,933,476	50,508,746	47,517,340	47,517,340	48,598,907	41,764,635
L2 Recorded Adjusted Revenue	40,445,741	39,888,701	41,326,526	43,277,375	45,900,584	48,563,855	45,458,699	46,193,858	43,033,461	42,808,961	41,131,344	38,968,462
L3 Target vs. Actual Revenue	3,683,688	2,824,228	4,625,250	5,448,033	4,550,635	3,440,594	4,475,777	4,314,890	4,483,879	4,709,379	5,467,563	2,796,173
L4 Reversal of Previous Year Accrual	(3,910,640)	(3,873,501)	(4,160,513)	(5,518,592)	(5,956,735)	(6,117,873)	(6,024,188)	(6,133,236)	(5,514,770)	(5,430,235)	(5,141,776)	(4,873,416)
L5 Net RBA Change	(228,952)	(1,049,273)	(494,737)	(70,559)	(1,006,100)	(677,079)	(82,267,427)	(1,818,346)	(1,030,891)	(721,890)	323,787	(2,077,243)
L6 Beginning RBA Balance	64,830,562	64,700,876	63,690,874	64,212,547	64,199,163	62,860,842	62,267,427	60,882,747	59,252,647	58,514,387	57,881,569	56,179,694
L7 End Balance Before Interest	64,603,610	63,651,603	64,155,611	64,141,988	62,793,063	62,183,763	60,754,480	59,076,721	58,174,910	57,333,175	56,115,358	54,102,651
L8 (L6 + L7) * 2 or (L8 + L7) * 2 * [1]	129,207,220	127,303,206	128,311,222	128,283,976	126,986,126	124,367,526	121,508,967	118,153,442	116,349,820	114,666,350	113,230,716	108,205,302
L9 Balance Subject to Interest	94,379	93,590	96,936	97,175	96,568	95,701	94,785	93,399	92,287	91,340	90,607	89,907
L10 Ending RBA Balance	64,697,989	63,745,193	64,212,547	64,199,163	62,849,631	62,239,464	60,774,801	59,083,311	58,227,197	57,784,931	56,166,896	54,153,558

Revised Adjustment to Revenue  
RBA Adjustment Recorded to Revenue  
Adjustment to Revenue

3,683,688	2,824,228	4,625,250	5,448,033	4,550,635	3,440,594	4,475,777	4,314,890	4,483,879	4,709,379	5,467,563	2,796,173
3,683,688	2,824,228	4,625,250	5,448,033	4,550,635	3,440,594	4,475,777	4,314,890	4,483,879	4,709,379	5,467,563	2,796,173

Revised Interest  
Interest Recorded  
Adjustment to Interest

94,379	93,590	96,936	97,175	96,568	95,701	94,785	93,399	92,287	91,340	90,607	89,907
94,379	93,590	96,936	97,175	96,568	95,701	94,785	93,399	92,287	91,340	90,607	89,907

Note [1]

In connection with Decision and Order No. 31900 on Schedule A of the Decoupling Investigation, issued on February 7, 2014, the Company received approval on April 28, 2014 from the Internal Revenue Service to change its tax treatment of RBA revenues from the book accrual method of revenue balancing account ("RBA") revenue recognition to a recognition method based on when rates are adjusted and revenues are collected, effective January 1, 2014. Accordingly, starting with May 2014, interest is calculated based on a net-of-income tax RBA balance, and the following income tax factor is used in the calculation.

Income Tax Factor (1 / (1 - tax rate)) 1.636928121

Note [2]

Totals may not add exactly due to rounding.

Note [3]

The Company recorded an adjustment to the RBA related to a customer billing adjustments that were processed in February 2016. The Company recalculated the RBA, including interest, based on the billing adjustments in the prior months incurred.

HECO-WP-B-003  
HAWAIIAN ELECTRIC COMPANY, INC.  
FEB 2018 ADJUSTMENT - MISCELLANEOUS CUSTOMER BILLING ADJUSTMENTS

REVENUE BALANCING ACCOUNT - REVENUE TRACKER

AS PREVIOUSLY STATED

	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16
Monthly Target Revenue	48,596,907	45,101,204	48,552,827	48,047,584	51,226,633	52,792,780	50,702,234	51,234,900	48,247,991	48,247,991	47,308,677
Recorded Adjusted Revenue	42,716,788	42,125,471	43,533,632	41,994,944	47,281,491	49,462,250	47,377,603	45,860,541	48,028,249	45,122,645	43,233,334
Target vs. Actual Revenue	5,880,119	2,975,733	5,019,195	6,052,640	3,945,142	3,330,530	3,324,631	5,374,359	2,219,742	3,125,346	4,075,343
Reversal of Previous Year Accrual	(5,192,949)	(5,327,198)	(5,401,784)	(3,685,156)	(5,301,934)	(5,377,653)	(5,375,270)	(5,110,063)	(5,072,650)	(4,877,639)	(4,634,357)
Net RBA Change	(1,312,830)	(2,351,465)	(382,589)	2,367,484	(1,356,792)	(2,247,123)	(2,050,639)	3,144,296	(2,852,908)	(1,752,293)	(559,014)
Beginning RBA Balance	56,170,976	54,910,779	52,627,239	52,304,205	54,740,597	53,446,936	51,234,324	49,251,829	49,810,143	46,800,320	45,048,941
End Balance Before Interest	54,858,146	52,559,314	52,244,650	54,691,689	53,383,805	51,199,813	49,183,645	46,568,125	46,737,235	45,048,027	44,528,927
Balance Subject to Interest	33,913,845	32,826,740	32,033,118	32,681,896	33,026,599	31,984,344	30,872,681	30,183,944	29,435,416	28,055,078	27,374,083
Interest	49,458	47,872	48,715	47,661	48,164	46,815	44,731	44,018	42,927	40,914	39,921
Ending RBA Balance	54,907,604	52,607,186	52,293,365	54,739,350	53,431,969	51,246,428	49,228,416	49,610,143	48,800,162	45,089,941	44,569,848

Target vs Actual Difference:  
Recorded Adjusted Revenues - Unadjusted  
Billing Adjustments: Customer 1  
Revised Revenues  
Target

Total Billing  
Adjustment  
(286,413)  
Prior to Dec  
2015  
(21,773)  
(274,640)

AS REVISED

	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16
Monthly Target Revenue	46,596,907	45,101,204	48,552,827	48,047,584	51,226,633	52,792,780	50,702,234	51,234,900	48,247,991	48,247,991	47,308,677
Recorded Adjusted Revenue	42,704,878	42,113,980	43,521,987	41,973,134	47,259,072	49,439,490	47,366,223	45,837,742	48,005,506	45,100,462	43,211,561
Target vs. Actual Revenue	3,892,028	2,987,224	5,030,840	6,074,450	3,967,561	3,353,290	3,336,011	5,447,158	2,242,485	3,147,529	4,097,116
Reversal of Previous Year Accrual	(5,192,949)	(5,327,198)	(5,401,784)	(3,685,156)	(5,301,934)	(5,377,653)	(5,375,270)	(5,110,063)	(5,072,650)	(4,877,639)	(4,634,357)
Net RBA Change	(1,300,921)	(2,339,974)	(370,944)	2,409,294	(1,334,373)	(2,224,363)	(2,039,259)	3,337,095	(2,830,165)	(1,730,110)	(537,241)
Beginning RBA Balance	56,284,813	55,018,614	52,744,665	52,433,366	54,881,713	53,620,614	51,430,928	49,459,993	49,841,301	47,054,437	45,365,478
End Balance Before Interest	54,963,892	52,676,640	52,373,721	54,842,680	53,557,339	51,396,252	49,391,669	46,787,087	47,011,136	45,324,326	44,828,236
Balance Subject to Interest	33,974,808	32,894,904	32,106,411	32,767,474	33,125,763	32,077,402	30,796,262	30,318,075	29,543,577	28,217,094	27,549,670
Interest	49,547	47,972	48,825	47,786	48,308	46,780	44,911	44,214	43,143	41,150	40,177
Ending RBA Balance	55,013,439	52,724,612	52,420,546	54,890,466	53,605,647	51,443,032	49,436,560	49,841,301	47,054,279	45,365,478	44,868,413

Revised Adjustment to Revenue  
RBA Adjustment Recorded to Revenue  
Adjustment to Revenue

Total RBA  
Adjustment  
(286,413)  
Prior to Dec  
2015  
(21,773)  
(274,640)

HECO-WP-B-004  
HAWAIIAN ELECTRIC COMPANY, INC.  
MAR 2019 ADJUSTMENT - MISCELLANEOUS CUSTOMER BILLING ADJUSTMENTS

REVENUE BALANCING ACCOUNT - REVENUE TRACKER

AS PREVIOUSLY STATED

	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15
Monthly Target Revenue	44,126,429	42,712,929	45,981,776	48,725,408	50,451,219	52,004,449	49,933,478	50,508,746	47,517,340	47,517,340	48,596,907	41,784,035
Recorded Adjusted Revenue	40,445,741	39,886,701	41,326,526	43,277,375	45,891,819	46,554,880	45,447,934	46,165,091	43,024,232	42,798,914	41,121,307	38,998,462
Target vs Actual Revenue	3,680,688	2,826,228	4,655,250	5,448,033	4,559,400	5,449,569	4,485,542	4,343,655	4,493,108	4,718,426	5,475,600	2,895,628
Reversal of Previous Year Actual	(3,910,640)	(3,875,501)	(4,160,513)	(5,518,592)	(5,950,735)	(6,117,873)	(6,024,188)	(6,133,286)	(5,514,770)	(5,430,235)	(5,141,776)	(4,873,410)
Net RBA Change	(228,952)	(1,049,273)	(504,737)	(693,184)	(1,391,335)	(1,367,304)	(1,538,646)	(1,788,595)	(1,021,662)	(711,809)	(333,824)	(2,007,207)
Beginning RBA Balance	64,830,562	64,700,876	63,860,874	62,472,869	60,860,842	59,860,842	58,303,325	56,803,680	54,260,311	52,518,823	50,865,469	48,283,901
End Balance Before Interest	64,903,810	63,651,603	64,155,811	64,181,286	62,821,445	62,220,832	60,765,680	59,084,377	57,807,014	56,196,282	54,190,685	51,190,685
Balance Subject to Interest	64,717,088	64,176,239	63,964,545	62,741,721	61,504,253	60,214,721	58,961,733	57,741,733	56,531,727	55,351,727	54,191,981	51,191,981
Interest	84,379	93,590	58,936	57,184	56,590	55,730	54,821	53,444	52,340	51,817	51,701	50,868
Ending RBA Balance	64,697,969	63,745,193	64,212,547	64,218,480	62,877,735	62,276,362	60,820,501	59,137,921	58,290,969	57,858,531	56,250,963	53,247,081

Target vs Actual Difference.  
Recorded Adjusted Revenues - Unadjusted  
Billing Adjustments  
Revised Revenues  
Target:

	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15
Monthly Target Revenue	44,126,429	42,712,929	45,981,776	48,725,408	50,451,219	52,004,449	49,933,478	50,508,746	47,517,340	47,517,340	48,596,907	41,784,035
Recorded Adjusted Revenue	40,445,741	39,886,701	41,326,526	43,277,375	45,891,819	46,554,880	45,447,934	46,165,091	43,024,232	42,798,914	41,121,307	38,998,462
Target vs Actual Revenue	3,680,688	2,826,228	4,655,250	5,448,033	4,559,400	5,449,569	4,485,542	4,343,655	4,493,108	4,718,426	5,475,600	2,895,628
Reversal of Previous Year Actual	(3,910,640)	(3,875,501)	(4,160,513)	(5,518,592)	(5,950,735)	(6,117,873)	(6,024,188)	(6,133,286)	(5,514,770)	(5,430,235)	(5,141,776)	(4,873,410)
Net RBA Change	(228,952)	(1,049,273)	(504,737)	(693,184)	(1,391,335)	(1,367,304)	(1,538,646)	(1,788,595)	(1,021,662)	(711,809)	(333,824)	(2,007,207)
Beginning RBA Balance	64,830,562	64,700,876	63,860,874	62,472,869	60,860,842	59,860,842	58,303,325	56,803,680	54,260,311	52,518,823	50,865,469	48,283,901
End Balance Before Interest	64,903,810	63,651,603	64,155,811	64,181,286	62,821,445	62,220,832	60,765,680	59,084,377	57,807,014	56,196,282	54,190,685	51,190,685
Balance Subject to Interest	64,717,088	64,176,239	63,964,545	62,741,721	61,504,253	60,214,721	58,961,733	57,741,733	56,531,727	55,351,727	54,191,981	51,191,981
Interest	84,379	93,590	58,936	57,184	56,590	55,730	54,821	53,444	52,340	51,817	51,701	50,868
Ending RBA Balance	64,697,969	63,745,193	64,212,547	64,218,480	62,877,735	62,276,362	60,820,501	59,137,921	58,290,969	57,858,531	56,250,963	53,247,081

AS REVISED

	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15
Monthly Target Revenue	44,126,429	42,712,929	45,981,776	48,725,408	50,451,219	52,004,449	49,933,478	50,508,746	47,517,340	47,517,340	48,596,907	41,784,035
Recorded Adjusted Revenue	40,445,741	39,886,701	41,326,526	43,277,375	45,891,819	46,554,880	45,447,934	46,165,091	43,024,232	42,798,914	41,121,307	38,998,462
Target vs Actual Revenue	3,680,688	2,826,228	4,655,250	5,448,033	4,559,400	5,449,569	4,485,542	4,343,655	4,493,108	4,718,426	5,475,600	2,895,628
Reversal of Previous Year Actual	(3,910,640)	(3,875,501)	(4,160,513)	(5,518,592)	(5,950,735)	(6,117,873)	(6,024,188)	(6,133,286)	(5,514,770)	(5,430,235)	(5,141,776)	(4,873,410)
Net RBA Change	(228,952)	(1,049,273)	(504,737)	(693,184)	(1,391,335)	(1,367,304)	(1,538,646)	(1,788,595)	(1,021,662)	(711,809)	(333,824)	(2,007,207)
Beginning RBA Balance	64,830,562	64,700,876	63,860,874	62,472,869	60,860,842	59,860,842	58,303,325	56,803,680	54,260,311	52,518,823	50,865,469	48,283,901
End Balance Before Interest	64,903,810	63,651,603	64,155,811	64,181,286	62,821,445	62,220,832	60,765,680	59,084,377	57,807,014	56,196,282	54,190,685	51,190,685
Balance Subject to Interest	64,717,088	64,176,239	63,964,545	62,741,721	61,504,253	60,214,721	58,961,733	57,741,733	56,531,727	55,351,727	54,191,981	51,191,981
Interest	84,379	93,590	58,936	57,184	56,590	55,730	54,821	53,444	52,340	51,817	51,701	50,868
Ending RBA Balance	64,697,969	63,745,193	64,212,547	64,218,480	62,877,735	62,276,362	60,820,501	59,137,921	58,290,969	57,858,531	56,250,963	53,247,081
Revised Adjustment to Revenue	3,683,688	2,824,228	4,655,250	5,447,341	4,559,400	5,449,569	4,485,542	4,323,655	4,493,108	4,718,426	5,475,600	2,895,628
RBA Adjustment Recorded to Revenue	3,683,688	2,824,228	4,655,250	5,448,033	4,550,335	5,440,794	4,478,777	4,314,890	4,483,879	4,708,379	5,465,563	2,788,173
Adjustment to Revenue	-	-	-	19,308	8,765	8,765	8,765	8,765	9,229	10,047	10,037	10,008
Revised Interest	84,379	93,590	58,936	57,184	56,590	55,730	54,821	53,444	52,340	51,817	51,701	50,868
Interest Recorded	84,379	93,590	58,936	57,175	56,583	55,701	54,765	53,399	52,287	51,758	51,630	50,907
Adjustment to Interest	-	-	-	9	22	29	30	45	53	61	71	79

Note (1)  
In connection with Decision and Order No. 31008 on Schedule A of the Debouging Investigation, issued on February 7, 2014, the Company received approval on April 28, 2014 from the Internal Revenue Service to change its tax treatment of RBA revenues from the book actual method of revenue balancing account ("RBA") revenue recognition to a recognition method based on when rates are adjusted and revenues are collected, effective January 1, 2014. Accordingly, starting with May 2014, interest is calculated based on a net-of-income tax RBA balance, and the following income tax factor is used in the calculation.

Income Tax Factor ( 1 / tax rate)

1.638529121

Note (2)

Totals may not add exactly due to rounding

Note (3)

The Company recorded adjustments to the RBA related to miscellaneous customer billing adjustments that were processed in March 2018. The Company recalculated the RBA, including interest, based on the billing adjustments in the prior months incurred.

REVENUE BALANCING ACCOUNT - REVENUE TRACKER

AS PREVIOUSLY STATED

	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-16	Feb-16	Total Error Adjusted (121,627)
L1 Monthly Target Revenue	48,598,007	45,101,204	48,552,827	48,047,584	51,228,833	52,782,780	50,702,234	51,284,900	48,247,991	48,247,991	47,308,877	42,407,239	
L2 Recorded Adjusted Revenue	42,708,751	42,125,471	43,533,832	41,894,944	47,281,481	49,482,250	47,377,880	47,377,880	46,028,249	45,122,845	43,233,334	41,404,808	
L3 Target vs Actual Revenue	3,889,256	2,975,733	5,018,995	6,152,640	3,945,352	3,300,530	3,324,354	3,906,920	2,219,742	3,125,146	4,075,543	1,002,431	
L4 Reversal of Previous Year Actual	(1,192,049)	(5,327,198)	(5,401,784)	(3,895,156)	(5,301,834)	(5,577,853)	(5,373,270)	(5,110,063)	(5,072,850)	(4,877,839)	(4,834,357)	(4,381,515)	
L5 Net RBA Change	(1,312,600)	(2,351,465)	(3,922,869)	2,397,484	(1,358,782)	(2,247,123)	(2,008,659)	(40,781,296)	(3,735,222)	(1,752,293)	(559,014)	(3,379,084)	
L6 Beginning RBA Balance	59,170,978	54,810,779	52,827,239	52,394,205	54,740,597	53,448,876	51,234,324	49,251,829	49,810,143	48,900,320	45,008,941	44,879,817	
L7 Ending RBA Balance	54,858,148	52,559,314	52,244,659	54,891,859	53,383,855	51,199,813	49,183,885	49,560,125	48,757,235	48,048,027	44,529,927	41,500,533	
L8 End Balance Before Interest	33,913,845	32,028,740	32,003,118	32,881,898	33,029,599	31,894,349	30,672,881	30,183,044	29,435,418	28,955,078	27,374,983	26,384,817	
L9 Interest Subject to Interest	49,458	47,872	48,715	47,661	48,194	46,615	44,731	44,018	42,927	40,914	39,921	38,478	
L10 L8 x 1.75% x 12	54,807,804	52,807,186	52,291,365	54,739,350	53,431,999	51,246,428	49,228,416	49,610,143	48,800,162	45,068,941	44,569,848	41,539,011	

Target vs Actual Difference:  
Recorded Adjusted Revenues - Unduly  
Billing Adjustments  
Revised Revenues  
Target

AS REVISED

	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-16	Feb-16	Total Error Adjusted (121,627)
L1 Monthly Target Revenue	48,598,007	45,101,204	48,552,827	48,047,584	51,228,833	52,782,780	50,702,234	51,284,900	48,247,991	48,247,991	47,308,877	42,407,239	
L2 Recorded Adjusted Revenue	42,708,751	42,125,471	43,533,832	41,894,944	47,281,481	49,482,250	47,377,880	47,377,880	46,028,249	45,122,845	43,233,334	41,404,808	
L3 Target vs Actual Revenue	3,889,256	2,975,733	5,018,995	6,152,640	3,945,352	3,300,530	3,324,354	3,906,920	2,219,742	3,125,146	4,075,543	1,002,431	
L4 Reversal of Previous Year Actual	(1,192,049)	(5,327,198)	(5,401,784)	(3,895,156)	(5,301,834)	(5,577,853)	(5,373,270)	(5,110,063)	(5,072,850)	(4,877,839)	(4,834,357)	(4,381,515)	
L5 Net RBA Change	(1,302,793)	(2,341,429)	(3,722,554)	2,387,484	(1,366,782)	(2,247,123)	(2,008,659)	(40,781,296)	(3,735,222)	(1,752,293)	(559,014)	(3,379,084)	
L6 Beginning RBA Balance	59,170,978	54,810,779	52,827,239	52,394,205	54,740,597	53,448,876	51,234,324	49,251,829	49,810,143	48,900,320	45,008,941	44,879,817	
L7 Ending RBA Balance	54,858,148	52,559,314	52,244,659	54,891,859	53,383,855	51,199,813	49,183,885	49,560,125	48,757,235	48,048,027	44,529,927	41,500,533	
L8 End Balance Before Interest	33,914,411	32,029,490	32,003,600	32,751,967	33,102,738	32,048,558	30,746,656	30,269,287	29,511,827	28,131,558	27,450,830	26,461,431	
L9 Interest Subject to Interest	49,546	47,970	48,821	47,772	48,275	46,726	44,842	44,130	43,038	41,025	40,022	38,580	
L10 L8 x 1.75% x 12	55,011,551	52,721,588	52,415,686	54,865,984	53,566,714	51,371,284	49,353,383	49,735,222	48,925,352	45,214,242	44,695,260	41,864,535	

Revised Adjustment to Revenue  
RBA Adjustment Recorded to Revenue  
Adjustment to Revenue

Revised Interest  
Interest Recorded  
Adjustment to Interest

HECO-WP-B-005  
HAWAIIAN ELECTRIC COMPANY, INC.  
MAR 2016 ADJUSTMENT - MISCELLANEOUS CUSTOMER BILLING ADJUSTMENTS

REVENUE BALANCING ACCOUNT - REVENUE TRACKER

AS PREVIOUSLY STATED		Nov-15	Dec-15	Jan-16	Feb-16	
L1	Monthly Target Revenue	48,247,991	48,247,991	47,308,677	42,407,239	
L2	Recorded Adjusted Revenue	46,028,249	45,122,645	43,233,334	41,404,808	
L3 L1 - L2	Target vs. Actual Revenue	2,219,742	3,125,346	4,075,343	1,002,431	
L4	Reversal of Previous Year Accrual	(5,072,650)	(4,877,639)	(4,634,357)	(4,381,515)	
L5 L4 + L3	Net RBA Change	(2,852,908)	(1,752,293)	(559,014)	(3,379,084)	
L6	Beginning RBA Balance	49,610,143	46,800,320	45,088,941	44,879,617	
L7 L6 + L5	End Balance Before Interest	46,757,235	45,048,027	44,529,927	41,500,533	
L8 (L6 + L7) + 2 + [1]	Balance Subject to Interest	29,435,416	28,055,078	27,374,083	26,384,817	
L9 L8 x 1.75% + 12	Interest	42,927	40,914	39,921	38,478	
L10 L7 + L9	Ending RBA Balance	46,800,162	45,088,941	44,569,848	41,539,011	
Target vs Actual Difference:						
Recorded Adjusted Revenues - Unadjusted		46,028,249	45,122,645	43,233,334	41,404,808	Total Billing
Billing Adjustments		(1,693)	(3,546)	-	-	Adjustment
Revised Revenues		46,026,556	45,119,099	43,233,334	41,404,808	(5,239)
Target		48,247,991	48,247,991	47,308,677	42,407,239	
		2,221,435	3,128,892	4,075,343	1,002,431	
AS REVISED		Nov-15	Dec-15	Jan-16	Feb-16	
L1	Monthly Target Revenue	48,247,991	48,247,991	47,308,677	42,407,239	
L2	Recorded Adjusted Revenue	46,026,556	45,119,099	43,233,334	41,404,808	
L3 L1 - L2	Target vs. Actual Revenue	2,221,435	3,128,892	4,075,343	1,002,431	
L4	Reversal of Previous Year Accrual	(5,072,650)	(4,877,639)	(4,634,357)	(4,381,515)	
L5 L4 + L3	Net RBA Change	(2,851,215)	(1,748,747)	(559,014)	(3,379,084)	
L6	Beginning RBA Balance	49,610,143	46,802,013	45,094,183	44,884,863	
L7 L6 + L5	End Balance Before Interest	46,758,928	45,053,266	44,535,169	41,505,779	
L8 (L6 + L7) + 2 + [1]	Balance Subject to Interest	29,435,933	28,057,195	27,377,285	26,388,021	
L9 L8 x 1.75% + 12	Interest	42,927	40,917	39,925	38,483	
L10 L7 + L9	Ending RBA Balance	46,801,855	45,094,183	44,575,094	41,544,262	
Revised Adjustment to Revenue		2,221,435	3,128,892	4,075,343	1,002,431	Total RBA
RBA Adjustment Recorded to Revenue		2,219,742	3,125,346	4,075,343	1,002,431	Adjustment
Adjustment to Revenue		1,693	3,546	-	-	5,239

Note [1]

In connection with Decision and Order No. 31908 on Schedule A of the Decoupling Investigation, issued on February 7, 2014, the Company received approval on April 28, 2014 from the Internal Revenue Service to change its tax treatment of RBA revenues from the book accrual method of revenue balancing account ("RBA") revenue recognition to a recognition method based on when rates are adjusted and revenues are collected, effective January 1, 2014. Accordingly, starting with May 2014, interest is calculated based on a net-of-income tax RBA balance, and the following income tax factor is used in the calculation.

Income Tax Factor ( 1 / 1-tax rate) 1.636929121

Note [2]

Totals may not add exactly due to rounding.

Note [3]

The Company recorded adjustments to the RBA related to miscellaneous customer billing adjustments that were processed in March 2016. The Company recalculated the RBA based on the billing adjustments in the prior months incurred. No interest impact was calculated as the adjustments did not meet the interest recalculation threshold of \$50,000 per the Revenue Balancing Account provision tariff.

REVENUE BALANCING ACCOUNT - REVENUE TRACKER

AS PREVIOUSLY STATED

	June-12	July-12	Aug-12	Sept-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13
L1 Monthly Target Revenue	43,890,356	45,536,102	46,940,073	45,011,146	45,529,707	42,833,187	42,830,375	42,000,731	37,845,099	42,000,731	40,652,559	43,763,724
L2 Recorded Adjusted Revenue	37,844,203	40,909,846	41,328,298	39,445,423	41,324,162	38,633,624	40,479,114	38,528,431	35,028,258	39,226,528	38,772,031	40,347,419
L3 Target vs. Actual Revenue	6,046,153	4,626,256	5,611,775	5,565,723	4,205,545	4,200,123	2,357,598	3,472,300	2,816,841	2,774,203	1,860,528	3,416,305
L4 Reversal of Previous Year Accrual	(1,546,140)	(1,611,187)	(1,679,771)	(1,569,477)	(1,659,897)	(1,540,056)	(1,591,381)	(1,499,941)	(1,322,959)	(1,486,048)	(1,493,878)	(1,566,384)
L5 Net RBA Change	4,490,013	3,017,269	3,932,004	3,996,246	2,545,648	2,660,067	766,217	1,978,358	1,300,179	1,284,492	392,657	1,834,258
L6 Beginning RBA Balance	27,993,304	32,634,509	35,822,493	38,620,231	43,824,568	46,595,703	49,487,532	50,503,102	52,756,818	54,328,036	56,087,655	56,762,164
L7 End Balance Before Interest	32,483,317	32,651,778	39,754,497	43,616,477	48,370,218	49,250,210	50,238,756	52,486,050	54,079,280	55,583,252	56,439,874	56,549,129
L8 (L6 + L7) - 2 or (L6 + L7) + 2 - (1)	30,236,311	34,143,143	37,784,985	41,618,354	45,097,392	47,822,857	49,558,816	51,474,227	53,382,359	54,844,175	56,246,699	57,635,169
L9 L8 x (6% or 1.75%) + 12	151,192	170,716	188,942	208,092	225,487	239,615	249,284	257,371	266,912	274,721	281,233	286,176
L10 L7 + L9	32,634,509	35,822,493	39,943,440	43,824,568	48,595,703	49,488,825	50,488,050	52,711,779	54,296,192	55,862,973	56,721,208	58,837,305

Target vs Actual Difference:

Recorded Adjusted Revenues - Unadjusted	37,844,203	40,909,846	41,328,298	39,445,423	41,324,162	38,633,624	40,479,114	38,528,431	35,028,258	39,226,528	38,772,031	40,347,419
Billing Adjustments	(1,619)	(1,386)				(5,560)	(6,337)	(6,337)	(6,337)	(6,337)	(6,337)	(6,337)
Revised Revenues	37,842,584	40,908,460	41,326,912	39,445,423	41,324,162	38,633,187	40,472,777	38,522,094	35,021,921	39,220,191	38,765,694	40,341,082
Target	43,890,356	45,536,102	46,940,073	45,011,146	45,529,707	42,833,187	42,830,375	42,000,731	37,845,099	42,000,731	40,652,559	43,763,724
	6,037,772	4,626,842	5,611,775	5,565,723	4,205,545	4,200,123	2,357,598	3,472,637	2,823,178	2,780,540	1,860,865	3,422,842

AS REVISED

	June-12	July-12	Aug-12	Sept-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13
L1 Monthly Target Revenue	43,890,356	45,536,102	46,940,073	45,011,146	45,529,707	42,833,187	42,830,375	42,000,731	37,845,099	42,000,731	40,652,559	43,763,724
L2 Recorded Adjusted Revenue	37,842,584	40,908,460	41,326,912	39,445,423	41,324,162	38,633,064	40,472,777	38,522,094	35,021,921	39,220,191	38,765,694	40,341,082
L3 Target vs. Actual Revenue	6,037,772	4,626,842	5,611,775	5,565,723	4,205,545	4,200,123	2,357,598	3,472,637	2,823,178	2,780,540	1,860,865	3,422,842
L4 Reversal of Previous Year Accrual	(1,546,140)	(1,611,187)	(1,679,771)	(1,569,477)	(1,659,897)	(1,540,056)	(1,591,381)	(1,499,941)	(1,322,959)	(1,486,048)	(1,493,878)	(1,566,384)
L5 Net RBA Change	4,491,632	3,016,655	3,932,004	3,996,246	2,545,648	2,660,067	766,217	1,978,358	1,300,179	1,284,492	392,657	1,834,258
L6 Beginning RBA Balance	27,993,304	32,634,514	35,825,514	38,623,267	43,827,620	46,598,770	49,487,532	50,503,102	52,756,818	54,328,036	56,087,655	56,762,164
L7 End Balance Before Interest	32,484,936	32,654,787	39,757,516	43,619,513	48,373,268	49,258,837	50,243,749	52,481,797	54,057,096	55,622,528	56,480,742	56,586,422
L8 (L6 + L7) - 2 or (L6 + L7) + 2 - (1)	30,239,120	34,145,459	37,791,516	41,621,349	45,100,444	47,828,804	49,670,640	51,482,447	53,387,007	54,975,282	56,284,298	57,676,293
L9 L8 x (6% or 1.75%) + 12	151,196	170,727	188,958	208,107	225,502	239,644	249,353	257,462	267,005	274,876	281,421	286,396
L10 L7 + L9	32,636,122	35,825,514	39,946,376	43,821,626	48,598,770	49,498,481	50,503,102	52,739,259	54,324,131	55,897,404	56,762,164	58,884,618
	1,624	3,021	3,037	3,052	3,067	6,656	15,052	21,480	27,939			

Revised Adjustment to Revenue

RBA Adjustment Recorded to Revenue	6,037,772	4,626,842	5,611,775	5,565,723	4,205,545	4,200,123	2,357,598	3,472,637	2,823,178	2,780,540	1,860,865	3,422,842
Adjustment to Revenue	6,036,153	4,626,456	5,611,775	5,565,723	4,205,545	4,194,563	2,351,261	3,472,300	2,816,841	2,774,203	1,860,528	3,416,305
	1,619	1,386				5,560	6,337	6,337	6,337	6,337	6,337	6,337
Revised Interest	151,186	170,727	188,958	208,107	225,502	239,644	249,353	257,462	267,005	274,876	281,421	286,396
Interest Recorded	151,192	170,716	188,942	208,092	225,487	239,615	249,284	257,371	266,912	274,721	281,233	286,176
Adjustment to Interest	4	11	16	15	15	29	39	91	123	155	188	220

Note [1]  
In connection with Decision and Order No. 31908 on Schedule A of the Occupying Investigation, issued on February 7, 2014, the Company received approval on April 28, 2014 from the Internal Revenue Service to change its tax treatment of RBA revenues from the book accrual method of revenue balancing account ("RBA") revenue recognition to a recognition method based on when rates are adjusted and revenues are collected, effective January 1, 2014. Accordingly, starting with May 2014, interest is calculated based on a net-of-income tax RBA balance, and the following income tax factor is used in the calculation.

Income Tax Factor (1 / 1-tax rate) 1.636929121

Note [2]  
Totals may not add exactly due to rounding.

Note [3]  
The Company recorded adjustments to the RBA related to miscellaneous customer billing adjustments that were processed in April 2016. The Company recalculated the RBA and interest based on the billing adjustments in the prior months incurred.

REVENUE BALANCING ACCOUNT - REVENUE TRACKER

AS PREVIOUSLY STATED

	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14
L1 Monthly Target Revenue	46,145,216	47,779,642	49,250,622	47,289,315	47,834,122	45,001,122	45,001,122	44,129,429	39,553,044	44,129,429	42,712,928	45,881,778
L2 Recorded Adjusted Revenue	40,284,650	42,838,763	43,680,012	41,909,065	42,972,492	40,870,690	41,176,802	40,155,441	37,871,094	40,445,741	39,888,701	41,326,528
L3 Target vs. Actual Revenue	5,860,568	4,940,879	5,570,610	5,380,250	5,261,630	4,130,432	3,826,320	3,973,988	1,681,950	3,683,688	2,824,228	4,555,250
L4 Reversal of Previous Year Accrual	(4,107,427)	(4,426,857)	(4,465,163)	(4,277,005)	(4,415,078)	(4,102,803)	(4,255,258)	(3,925,516)	(3,761,214)	(3,910,640)	(3,873,501)	(4,160,513)
L5 Net RBA Change	1,746,804	514,022	1,105,447	1,109,254	846,552	27,679	(426,601)	54,809	(2,072,927)	(226,952)	(1,043,273)	494,737
L6 Beginning RBA Balance	58,883,162	60,967,698	61,601,160	63,180,911	64,514,125	65,785,942	66,292,844	66,253,568	66,539,782	64,912,549	64,762,883	63,748,443
L7 End Balance Before Interest	59,759,732	61,224,709	62,706,827	64,288,905	65,460,877	65,613,571	65,868,243	66,308,377	64,568,854	64,685,597	63,740,047	64,247,774
L8 Balance Subject to Interest	298,799	308,124	310,770	318,677	325,187	328,999	330,398	331,405	328,017	328,017	328,017	328,017
L9 Interest	60,935,103	61,707,845	63,017,397	64,608,582	65,785,864	66,142,570	66,196,641	66,639,742	64,804,871	64,780,096	63,803,762	64,304,780
L10 Ending RBA Balance	60,880,999	61,733,470	62,962,750	64,547,297	65,724,273	66,080,671	66,128,078	66,564,524	64,812,884	64,697,989	63,745,103	64,212,547

Target vs Actual Difference:  
Recorded Adjusted Revenues - Unadjusted  
Billing Adjustments  
Revised Revenues  
Target

Target vs Actual Difference:	40,284,650	42,838,763	43,680,012	41,909,065	42,972,492	40,870,690	41,176,802	40,155,441	37,871,094	40,445,741	39,888,701	41,326,528
Billing Adjustments	(6,337)			(6,349)			(6,337)	(6,337)	(6,337)		(6,337)	(1,595)
Revised Revenues	46,145,216	47,779,642	49,250,622	47,289,315	47,834,122	40,870,690	41,176,802	40,155,441	37,871,094	40,445,741	39,888,701	41,326,528
Target	5,860,568	4,940,879	5,570,610	5,380,250	5,261,630	4,130,432	3,826,320	3,973,988	1,681,950	3,683,688	2,824,228	4,555,250

AS REVISED

	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14
L1 Monthly Target Revenue	46,145,216	47,779,642	49,250,622	47,289,315	47,834,122	45,001,122	45,001,122	44,129,429	39,553,044	44,129,429	42,712,928	45,881,778
L2 Recorded Adjusted Revenue	40,284,650	42,838,763	43,680,012	41,909,065	42,972,492	40,870,690	41,176,802	40,155,441	37,871,094	40,445,741	39,888,701	41,326,528
L3 Target vs. Actual Revenue	5,860,568	4,940,879	5,570,610	5,380,250	5,261,630	4,130,432	3,826,320	3,973,988	1,681,950	3,683,688	2,824,228	4,555,250
L4 Reversal of Previous Year Accrual	(4,107,427)	(4,426,857)	(4,465,163)	(4,277,005)	(4,415,078)	(4,102,803)	(4,255,258)	(3,925,516)	(3,761,214)	(3,910,640)	(3,873,501)	(4,160,513)
L5 Net RBA Change	1,753,141	514,022	1,105,447	1,109,254	846,552	27,679	(426,601)	54,809	(2,072,927)	(226,952)	(1,043,273)	494,737
L6 Beginning RBA Balance	58,883,162	60,967,698	61,601,160	63,180,911	64,514,125	65,785,942	66,292,844	66,253,568	66,539,782	64,912,549	64,762,883	63,748,443
L7 End Balance Before Interest	59,759,732	61,224,709	62,706,827	64,288,905	65,460,877	65,613,571	65,868,243	66,308,377	64,568,854	64,685,597	63,740,047	64,247,774
L8 Balance Subject to Interest	298,799	308,124	310,770	318,677	325,187	328,999	330,398	331,405	328,017	328,017	328,017	328,017
L9 Interest	60,935,103	61,707,845	63,017,397	64,608,582	65,785,864	66,142,570	66,196,641	66,639,742	64,804,871	64,780,096	63,803,762	64,304,780
L10 Ending RBA Balance	60,880,999	61,733,470	62,962,750	64,547,297	65,724,273	66,080,671	66,128,078	66,564,524	64,812,884	64,697,989	63,745,103	64,212,547

Revised Adjustment to Revenue  
RBA Adjustment Recorded to Revenue  
Adjustment to Revenue

Revised Adjustment to Revenue	5,860,568	4,940,879	5,570,610	5,380,250	5,261,630	4,130,432	3,826,320	3,973,988	1,681,950	3,683,688	2,824,228	4,555,250
RBA Adjustment Recorded to Revenue	5,854,231	4,940,879	5,570,610	5,380,150	5,261,630	4,130,432	3,822,320	3,973,988	1,681,950	3,683,688	2,824,228	4,555,250
Adjustment to Revenue	6,337			6,349			6,337	6,337	6,337		6,337	3,595

Revised Interest  
Interest Recorded  
Adjustment to Interest

Revised Interest	298,799	308,124	310,770	318,677	325,187	328,999	330,398	331,405	328,017	328,017	328,017	328,017
Interest Recorded	298,545	305,853	310,498	318,681	324,681	328,681	330,072	331,046	327,624	327,624	327,624	327,624
Adjustment to Interest	254	271	272	289	306	308	326	359	393	120	125	80



HECO-WP-B-006  
HAWAIIAN ELECTRIC COMPANY, INC.  
APR 2016 ADJUSTMENT - MISCELLANEOUS CUSTOMER BILLING ADJUSTMENTS

REVENUE BALANCING ACCOUNT - REVENUE TRACKER

AS PREVIOUSLY STATED

	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15
Monthly Target Revenue	48,725,408	50,451,219	52,004,449	49,933,476	50,508,746	47,517,340	47,517,340	48,596,907	41,764,635	48,596,907	45,101,204	48,552,827
Recorded Adjusted Revenue	43,277,375	45,900,584	46,563,655	45,456,699	46,193,856	43,033,461	42,808,961	41,131,344	38,968,462	42,716,788	42,125,471	43,533,632
Target vs. Actual Revenue	5,448,033	4,550,635	5,440,794	4,476,777	4,314,890	4,483,879	4,708,379	5,465,563	2,796,173	5,880,119	2,975,733	5,019,195
Reversal of Previous Year Actual	(5,518,592)	(5,956,735)	(6,117,873)	(6,024,180)	(6,132,236)	(5,514,770)	(5,430,235)	(5,141,776)	(4,873,168)	(5,192,949)	(5,327,198)	(5,401,784)
Net RBA Change	(70,559)	(1,406,100)	(677,079)	(1,547,411)	(1,816,346)	(1,030,891)	(721,856)	323,787	(2,077,243)	(1,312,830)	(2,351,465)	(382,589)
Beginning RBA Balance	84,212,547	84,199,163	82,850,842	82,267,427	80,848,256	79,205,301	78,455,031	77,791,569	76,179,894	74,510,978	72,810,779	71,102,239
End Balance Before Interest	84,141,988	82,793,063	82,183,783	80,720,016	79,174,910	77,733,175	76,115,356	74,515,556	72,810,934	71,102,239	69,487,773	67,878,188
Balance Subject to Interest	39,205,803	38,789,775	38,194,875	37,566,617	36,816,767	35,953,938	35,489,687	35,403,770	34,907,603	33,913,845	32,826,740	32,033,118
Interest	97,75	56,568	55,701	54,785	53,399	52,287	51,756	51,630	50,907	49,458	47,872	46,715
Ending RBA Balance	64,199,163	62,849,631	62,238,464	60,774,801	59,083,311	58,227,187	57,784,931	56,166,886	54,553,558	52,907,604	51,260,166	49,600,365

Target vs Actual Difference:

Recorded Adjusted Revenue - Unadjusted	43,277,375	45,900,584	46,563,655	45,456,699	46,193,856	43,033,461	42,808,961	41,131,344	38,968,462	42,716,788	42,125,471	43,533,632
Billing Adjustments	(6,337)											
Revised Revenue	43,271,038	45,900,584	46,563,655	45,456,699	46,193,856	43,033,461	42,808,961	41,131,344	38,968,462	42,716,788	42,125,471	43,533,632
Target	48,725,408	50,451,219	52,004,449	49,933,476	50,508,746	47,517,340	47,517,340	48,596,907	41,764,635	48,596,907	45,101,204	48,552,827
	5,454,370	4,550,635	5,440,794	4,476,777	4,314,890	4,483,879	4,708,379	5,465,563	2,796,173	5,880,119	2,975,733	5,019,195

AS REVISED

	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15	Mar-15	Apr-15	May-15
Monthly Target Revenue	48,725,408	50,451,219	52,004,449	49,933,476	50,508,746	47,517,340	47,517,340	48,596,907	41,764,635	48,596,907	45,101,204	48,552,827
Recorded Adjusted Revenue	43,271,038	45,900,584	46,563,655	45,456,699	46,193,856	43,033,461	42,808,961	41,131,344	38,968,462	42,716,788	42,125,471	43,533,632
Target vs. Actual Revenue	5,454,370	4,550,635	5,440,794	4,476,777	4,314,890	4,483,879	4,708,379	5,465,563	2,796,173	5,880,119	2,975,733	5,019,195
Reversal of Previous Year Actual	(5,518,592)	(5,956,735)	(6,117,873)	(6,024,180)	(6,132,236)	(5,514,770)	(5,430,235)	(5,141,776)	(4,873,168)	(5,192,949)	(5,327,198)	(5,401,784)
Net RBA Change	(64,222)	(1,406,100)	(677,079)	(1,547,411)	(1,816,346)	(1,030,891)	(721,856)	323,787	(2,077,243)	(1,312,830)	(2,351,465)	(382,589)
Beginning RBA Balance	84,304,790	84,297,828	82,859,595	82,266,268	80,947,187	79,304,819	78,554,137	77,891,763	76,270,347	74,649,931	73,029,515	71,409,100
End Balance Before Interest	84,240,568	82,891,728	82,282,516	80,818,857	79,284,841	77,743,928	76,203,034	74,662,150	73,041,934	71,501,517	69,959,773	68,419,188
Balance Subject to Interest	39,264,180	38,850,050	38,255,203	37,626,886	36,877,223	35,914,428	35,550,231	35,484,368	34,968,255	33,974,551	32,887,499	32,093,032
Interest	57,260	56,656	55,789	54,783	53,488	52,375	51,844	51,719	50,995	49,546	47,961	46,804
Ending RBA Balance	64,267,828	62,848,384	62,338,305	60,873,730	59,182,329	58,326,303	57,884,125	56,266,269	54,653,563	53,041,263	51,429,312	49,817,408

Revised Adjustment to Revenue

RBA Adjustment Recorded to Revenue	5,454,370	4,550,635	5,440,794	4,476,777	4,314,890	4,483,879	4,708,379	5,465,563	2,796,173	5,880,119	2,975,733	5,019,195
Adjustment to Revenue	6,337											

Revised Interest

Interest Recorded	57,260	56,656	55,789	54,783	53,488	52,375	51,844	51,719	50,995	49,546	47,961	46,804
Adjustment to Interest	57,175	56,568	55,701	54,785	53,399	52,287	51,756	51,630	50,907	49,458	47,872	46,715
	85	89	88	88	89	88	88	89	88	88	89	89

REVENUE BALANCING ACCOUNT - REVENUE TRACKER

AS PREVIOUSLY STATED

	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16
L1 Monthly Target Revenue	48,047,584	51,226,633	52,792,760	50,702,234	51,284,900	48,247,991	48,247,991	47,308,677	42,407,239	47,308,677
L2 Recorded Adjusted Revenue	41,994,944	47,281,491	49,462,250	47,377,603	45,860,541	48,028,249	45,122,645	43,233,334	41,404,808	43,945,263
L3 Target vs. Actual Revenue	6,052,640	3,945,142	3,330,530	3,324,631	5,424,359	2,219,742	3,125,346	4,075,343	1,002,431	3,363,414
L4 Reversal of Previous Year Accrual	(3,665,156)	(5,301,934)	(5,577,653)	(5,375,270)	(5,110,063)	(5,072,650)	(4,877,639)	(4,634,357)	(4,381,515)	(4,548,813)
L5 Net RBA Change	2,387,484	(1,356,792)	(2,247,123)	(2,050,639)	314,296	(2,852,908)	(1,752,293)	(559,014)	(3,379,094)	(1,185,399)
L6 Beginning RBA Balance	52,304,205	54,740,597	53,446,936	51,234,324	49,251,829	48,610,143	48,000,320	45,088,941	44,879,617	41,669,775
L7 End Balance Before Interest	54,693,689	53,383,805	51,199,813	49,183,685	46,757,125	45,048,027	44,529,927	41,500,533	40,484,376	38,595
L8 Balance Subject to Interest	32,681,896	33,026,599	31,964,349	30,672,681	30,183,944	29,435,416	28,055,076	27,374,083	26,384,817	25,093,985
L9 Interest	47,681	48,164	46,615	44,731	44,018	42,927	40,914	39,921	38,478	36,595
L10 Ending RBA Balance	54,739,350	53,431,969	51,246,426	49,228,116	49,610,143	48,600,162	45,088,941	44,569,848	41,539,011	40,520,871

Total Billing Adjustment (107,221)

Target vs Actual Difference:  
Recorded Adjusted Revenues - Unadjusted Billing Adjustments  
Revised Revenues  
Target

L1 L2 L3 L4 L5 L6 L7 L8 L9 L10

AS REVISED

	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16
L1 Monthly Target Revenue	48,047,584	51,226,633	52,792,760	50,702,234	51,284,900	48,247,991	48,247,991	47,308,677	42,407,239	47,308,677
L2 Recorded Adjusted Revenue	41,994,944	47,281,491	49,462,250	47,377,603	45,860,541	48,028,249	45,122,645	43,233,334	41,404,808	43,945,263
L3 Target vs. Actual Revenue	6,052,640	3,945,142	3,330,530	3,324,631	5,424,359	2,226,079	3,125,346	4,075,343	1,002,431	3,363,414
L4 Reversal of Previous Year Accrual	(3,665,156)	(5,301,934)	(5,577,653)	(5,375,270)	(5,110,063)	(5,072,650)	(4,877,639)	(4,634,357)	(4,381,515)	(4,548,813)
L5 Net RBA Change	2,387,484	(1,356,792)	(2,247,123)	(2,050,639)	314,296	(2,846,571)	(1,752,293)	(559,014)	(3,372,748)	(1,185,399)
L6 Beginning RBA Balance	52,403,842	54,840,323	53,548,751	51,334,228	49,351,822	48,710,225	48,008,831	45,195,547	44,986,318	41,782,909
L7 End Balance Before Interest	54,791,326	53,483,531	51,299,628	49,283,489	46,863,054	45,154,538	44,635,533	41,613,569	40,597,510	38,595
L8 Balance Subject to Interest	32,742,784	33,087,521	32,025,326	30,733,712	30,245,030	29,498,491	28,120,145	27,439,209	26,451,935	25,163,099
L9 Interest	47,750	48,253	46,704	44,620	44,107	43,010	41,009	40,016	38,578	36,696
L10 Ending RBA Balance	54,839,076	53,531,784	51,346,332	49,328,099	49,710,225	48,906,673	45,195,547	44,676,540	41,652,145	40,634,208

Total RBA Adjustment 107,221

Revised Adjustment to Revenue  
RBA Adjustment Recorded to Revenue  
Adjustment to Revenue

L1 L2 L3 L4 L5 L6 L7 L8 L9 L10

Total Interest Adjustment 6,012

Revised Interest  
Interest Recorded  
Adjustment to Interest

L1 L2 L3 L4 L5 L6 L7 L8 L9 L10

HECO-WP-B-007  
HAWAIIAN ELECTRIC COMPANY, INC.  
MAY 2016 ADJUSTMENT - MISCELLANEOUS CUSTOMER BILLING ADJUSTMENTS

## REVENUE BALANCING ACCOUNT - REVENUE TRACKER

AS PREVIOUSLY STATED

		Feb-16	Mar-16	Apr-16
L1	Monthly Target Revenue	42,407,239	47,308,677	45,793,747
L2	Recorded Adjusted Revenue	41,404,808	43,945,263	42,792,611
L3	L1 - L2	1,002,431	3,363,414	3,001,136
L4	Reversal of Previous Year Accrual	(4,381,515)	(4,548,813)	(4,608,612)
L5	L4 + L3	(3,379,084)	(1,185,399)	(1,607,476)
L6	Beginning RBA Balance	44,879,617	41,669,775	40,634,204
L7	L6 + L5	41,500,533	40,484,376	39,026,728
L8	(L6 + L7) + 2 + [1]	26,384,817	25,093,985	24,332,432
L9	L8 x 6% + 12	38,478	36,595	35,485
L10	L7 + L9	41,539,011	40,520,971	39,062,213

## Target vs Actual Difference:

Recorded Adjusted Revenues - Unadjusted	41,404,808	43,945,263	42,792,611	<u>Total Billing</u>
Billing Adjustments 1	(11,035)	-	-	<u>Adjustment</u>
Billing Adjustments 2	(3,142)	(851)	-	(11,035)
Revised Revenues	41,390,631	43,944,412	42,792,611	(3,993)
Target	42,407,239	47,308,677	45,793,747	(15,028)
	1,016,608	3,364,265	3,001,136	

AS REVISED

		Feb-16	Mar-16	Apr-16
L1	Monthly Target Revenue	42,407,239	47,308,677	45,793,747
L2	Recorded Adjusted Revenue	41,390,631	43,944,412	42,792,611
L3	L1 - L2	1,016,608	3,364,265	3,001,136
L4	Reversal of Previous Year Accrual	(4,381,515)	(4,548,813)	(4,608,612)
L5	L4 + L3	(3,364,907)	(1,184,548)	(1,607,476)
L6	Beginning RBA Balance	44,879,617	41,683,957	40,649,250
L7	L6 + L5	41,514,709	40,499,409	39,041,774
L8	(L6 + L7) + 2 + [1]	26,389,147	25,102,909	24,341,623
L9	L8 x 6% + 12	38,484	36,608	35,498
L10	L7 + L9	41,553,193	40,536,017	39,077,272

Revised Adjustment to Revenue	1,016,608	3,364,265	3,001,136	<u>Total RBA</u>
RBA Adjustment Recorded to Revenue	1,002,431	3,363,414	3,001,136	<u>Adjustment</u>
Adjustment to Revenue	14,177	851	-	15,028

## Note [1]

In connection with Decision and Order No. 31908 on Schedule A of the Decoupling Investigation, issued on February 7, 2014, the Company received approval on April 28, 2014 from the Internal Revenue Service to change its tax treatment of RBA revenues from the book accrual method of revenue balancing account ("RBA") revenue recognition to a recognition method based on when rates are adjusted and revenues are collected, effective January 1, 2014. Accordingly, starting with May 2014, interest is calculated based on a net-of-income tax RBA balance, and the following income tax factor is used in the calculation.

Income Tax Factor ( 1 / 1-tax rate)      1.636929121

## Note [2]

Totals may not add exactly due to rounding.

## Note [3]

The Company recorded adjustments to the RBA related to miscellaneous customer billing adjustments that were processed in May 2016. The Company recalculated the RBA based on the billing adjustment in the prior months incurred. No interest impact was calculated as the adjustment did not meet the interest recalculation threshold of \$50,000 per the Revenue Balancing Account provision tariff.

HECO-WP-B-008  
HAWAIIAN ELECTRIC COMPANY, INC.  
JUN 2016 ADJUSTMENT - MISCELLANEOUS & J to G RATE CHANGE CUSTOMER BILLING ADJUSTMENTS

REVENUE BALANCING ACCOUNT - REVENUE TRACKER

AS PREVIOUSLY STATED

	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12
L1 Monthly Target Revenue	36,452,740	35,681,973	37,812,917	39,048,559	41,350,321	45,898,046	44,070,246	44,577,970	41,937,817	41,937,817	41,125,462	38,860,599
L2 Rerecorded/Adjusted Revenue	37,268,214	35,823,429	37,102,931	36,409,559	38,728,840	38,485,213	38,384,653	38,798,697	36,574,001	39,961,212	39,527,395	37,356,068
L3 Target vs. Actual Revenue	(753,474)	(141,456)	709,986	2,638,970	2,821,383	7,412,833	5,685,395	5,778,273	5,363,816	1,976,605	1,598,077	(495,469)
L4 Reversal of Previous Year Accrual	(753,474)	(141,456)	709,986	2,638,970	2,821,383	7,412,833	5,685,395	5,778,273	5,363,816	1,976,605	1,598,077	(495,469)
L5 Net RBA Change	-	(837,054)	(983,046)	(276,202)	2,385,980	5,007,035	12,445,972	18,207,343	24,037,486	18,707,749	20,782,834	22,488,820
L6 Beginning RBA Balance	(753,474)	(753,474)	(273,362)	2,386,768	4,987,383	12,410,310	18,131,090	23,983,563	29,586,958	20,684,354	22,360,911	21,993,507
L7 End Balance Before Interest	(376,737)	(907,782)	(628,055)	1,042,283	3,876,872	8,713,451	15,290,234	21,098,520	26,719,394	19,696,052	21,581,872	22,248,319
L8 (L6 + L7) - 2 or (L6 + L7) - 2 - (1)	(1,684)	(4,539)	(3,140)	5,211	18,389	43,567	76,451	106,493	133,587	98,480	107,809	111,192
L9 L8 x (6% or 1.75%) - 12	(755,358)	(883,048)	(270,202)	2,385,980	5,007,035	12,463,435	18,209,383	24,093,149	29,534,899	20,782,834	22,488,820	22,101,776
L10 L7 + L9												

Target vs Actual Difference:  
Recorded Adjusted Revenues - Unadjusted

Billing Adjustments 1	37,206,214	35,823,429	37,102,931	36,409,559	38,728,840	38,485,213	38,384,653	38,798,697	36,574,222	39,961,425	39,527,599	37,356,068
Billing Adjustments 2	(244)	(257)	(258)	(257)	(258)	(268)	(277)	(223)	(221)	(214)	(214)	(246)
Revised Revenues	37,205,970	35,823,172	37,102,673	36,409,332	38,728,580	38,485,213	38,384,653	38,798,697	36,574,001	39,961,212	39,527,385	37,355,822
Target	(753,230)	(141,199)	710,244	2,637,227	2,821,841	7,412,833	5,685,395	5,778,273	5,363,816	1,976,605	1,598,077	(495,223)

AS REVISED

	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12
L1 Monthly Target Revenue	36,452,740	35,681,973	37,812,917	39,048,559	41,350,321	45,898,046	44,070,246	44,577,970	41,937,817	41,937,817	41,125,462	38,860,599
L2 Rerecorded/Adjusted Revenue	37,205,970	35,823,172	37,102,673	36,409,332	38,728,580	38,485,213	38,384,653	38,798,697	36,574,001	39,961,212	39,527,385	37,355,822
L3 Target vs. Actual Revenue	(753,230)	(141,199)	710,244	2,637,227	2,821,841	7,412,833	5,685,395	5,778,273	5,363,816	1,976,605	1,598,077	(495,223)
L4 Reversal of Previous Year Accrual	(753,230)	(141,199)	710,244	2,637,227	2,821,841	7,412,833	5,685,395	5,778,273	5,363,816	1,976,605	1,598,077	(495,223)
L5 Net RBA Change	-	(836,809)	(982,545)	(275,438)	2,387,005	5,007,035	12,445,972	18,207,343	24,037,486	18,707,749	20,782,834	22,488,820
L6 Beginning RBA Balance	(753,230)	(753,230)	(272,301)	2,386,768	4,987,383	12,410,310	18,131,090	23,983,563	29,586,958	20,684,354	22,360,911	21,993,507
L7 End Balance Before Interest	(376,615)	(907,408)	(627,823)	1,043,178	3,877,826	8,713,451	15,290,234	21,098,520	26,719,394	19,696,052	21,581,872	22,248,319
L8 (L6 + L7) - 2 or (L6 + L7) - 2 - (1)	(1,883)	(4,537)	(3,137)	5,216	18,389	43,567	76,451	106,493	133,587	98,480	107,809	111,192
L9 L8 x (6% or 1.75%) - 12	(755,113)	(882,545)	(275,138)	2,387,005	5,007,035	12,463,435	18,209,383	24,093,149	29,534,899	20,782,834	22,488,820	22,104,803
L10 L7 + L9												
Revised Adjustment to Revenue	(753,230)	(141,199)	710,244	2,637,227	2,821,841	7,412,833	5,685,395	5,778,273	5,363,816	1,976,605	1,598,077	(495,223)
RBA Adjustment Recorded to Revenue	(753,474)	(141,456)	709,986	2,638,970	2,821,383	7,412,833	5,685,395	5,778,273	5,363,816	1,976,605	1,598,077	(495,469)
Adjustment to Revenue	244	257	258	257	258	268	277	223	221	214	214	246

Note [1]

In connection with Decision and Order No. 31908 on Schedule A of the Decoupling Investigation, issued on February 7, 2014, the Company received approval on April 28, 2014 from the Internal Revenue Service to change its tax treatment of RBA revenues from the book accrual method of revenue balancing account ("RBA") revenue recognition to a recognition method based on when rates are adjusted and revenues are collected, effective January 1, 2014. Accordingly, starting with May 2014, interest is calculated based on a net-of-income tax RBA balance, and the following income tax factor is used in the calculation.

Income Tax Factor (1 / (1 + tax rate)) 1.936929121

Note [2]

Totals may not add exactly due to rounding.

Note [3]

The Company recorded adjustments to the RBA related to miscellaneous and J to G rate change customer billing adjustments that were processed in June 2016. The Company recalculated the RBA based on the billing adjustments in the prior months incurred. No interest impact was calculated as the adjustment did not meet the interest recalculation threshold of \$50,000 per the Revenue Balancing Account provision unit.

REVENUE BALANCING ACCOUNT - REVENUE TRACKER

	Mar-12	Apr-12	May-12	June-12	July-12	Aug-12	Sept-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13
AS PREVIOUSLY STATED												
L1 Monthly Target Revenue	41,125,462	40,152,722	43,255,064	43,980,356	45,538,102	48,940,073	45,011,146	45,529,707	42,833,187	42,830,375	42,000,731	37,645,099
L2 Recorded Adjusted Revenue	39,821,842	38,394,038	41,940,294	37,944,203	40,909,848	41,324,298	39,445,423	41,324,162	38,638,024	40,478,114	38,528,431	35,028,258
L3 Target vs. Actual Revenue	2,503,620	1,768,684	1,314,770	6,036,153	4,628,254	5,611,775	5,565,723	4,205,545	4,194,563	2,351,261	3,472,300	2,616,841
L4 Reversal of Previous Year Accrual	-	-	-	1,814,860	(1,611,187)	(1,569,477)	(1,569,897)	(1,569,897)	(1,540,056)	(1,591,381)	(1,499,941)	(1,322,999)
L5 Net RBA Change	2,503,620	1,768,684	1,314,770	4,490,013	3,017,269	3,932,004	3,996,246	2,545,503	2,654,507	759,880	1,293,359	1,293,359
L6 Beginning RBA Balance	21,734,634	24,353,387	26,243,181	27,693,304	32,634,509	35,822,493	39,620,231	43,824,568	48,595,703	49,478,878	50,480,050	52,711,561
L7 End Balance Before Interest	24,238,454	26,122,071	27,858,051	32,493,317	35,651,778	39,754,497	43,616,477	46,370,216	49,350,210	50,238,756	52,468,408	54,029,280
L8 Balance Subject to Interest	22,988,844	25,237,729	27,050,821	30,238,311	34,143,143	37,768,485	41,818,354	45,097,392	47,922,957	49,858,816	51,474,227	53,382,359
L9 Interest	114,933	126,189	135,253	151,192	170,716	188,942	208,092	225,487	239,615	249,294	257,371	266,912
L10 Ending RBA Balance	24,353,387	26,243,260	27,893,304	32,634,509	35,822,493	39,943,440	43,824,568	46,595,703	49,488,825	50,488,050	52,717,778	54,296,192
Target vs Actual Difference:												
Recorded Adjusted Revenues - Unadjusted	38,021,842	38,394,038	41,940,294	37,944,203	40,909,848	41,324,298	39,445,423	41,324,162	38,638,024	40,478,114	38,528,431	35,028,258
Billing Adjustments	(202)	(289)	(270)	(269)	(270)	(270)	(265)	(268)	(182)	(217)	(252)	(273)
Revised Revenues	38,021,540	38,393,769	41,639,934	37,843,934	40,909,578	41,324,028	39,445,158	41,323,894	38,638,432	40,478,897	38,528,179	35,027,985
Target	41,125,462	40,152,722	43,255,064	43,980,356	45,538,102	48,940,073	45,011,146	45,529,707	42,833,187	42,830,375	42,000,731	37,645,099
2,503,882	1,768,953	1,615,130	6,036,422	4,628,256	4,628,256	5,612,045	5,566,008	4,205,833	4,194,755	2,351,478	3,472,552	2,617,114
AS REVISED												
L1 Monthly Target Revenue	41,125,462	40,152,722	43,255,064	43,980,356	45,538,102	48,940,073	45,011,146	45,529,707	42,833,187	42,830,375	42,000,731	37,645,099
L2 Recorded Adjusted Revenue	38,021,540	38,393,769	41,639,934	37,843,934	40,909,578	41,324,028	39,445,158	41,323,894	38,638,432	40,478,897	38,528,179	35,027,985
L3 Target vs. Actual Revenue	2,503,882	1,768,953	1,615,130	6,036,422	4,628,256	5,612,045	5,566,008	4,205,833	4,194,755	2,351,478	3,472,552	2,617,114
L4 Reversal of Previous Year Accrual	-	-	-	(1,546,140)	(1,611,187)	(1,670,271)	(1,569,477)	(1,569,897)	(1,540,056)	(1,591,381)	(1,499,941)	(1,322,999)
L5 Net RBA Change	2,503,882	1,768,953	1,615,130	4,490,282	3,017,070	3,932,274	3,996,531	2,545,936	2,654,699	760,097	1,293,411	1,293,411
L6 Beginning RBA Balance	21,727,881	24,158,692	26,448,783	27,997,184	32,638,678	35,826,953	39,624,883	43,829,830	48,601,078	49,484,471	50,493,891	52,711,561
L7 End Balance Before Interest	24,241,743	26,125,845	27,861,912	32,487,486	35,668,916	39,769,227	43,621,514	46,375,566	49,355,778	50,244,568	52,468,501	54,035,878
L8 Balance Subject to Interest	22,993,802	25,241,169	27,054,347	30,242,325	34,147,419	37,783,090	41,823,248	45,102,598	47,928,438	49,864,520	51,480,194	53,388,818
L9 Interest	114,949	126,208	135,272	151,212	170,737	188,965	208,118	225,513	239,642	249,323	257,401	266,943
L10 Ending RBA Balance	24,398,692	26,251,651	27,997,184	32,638,678	35,826,953	39,946,193	43,829,830	46,601,079	49,495,420	50,493,891	52,723,902	54,302,819
Revised Adjustment to Revenue	2,503,882	1,768,953	1,615,130	6,036,422	4,628,256	5,612,045	5,566,008	4,205,833	4,194,755	2,351,478	3,472,552	2,617,114
RBA Adjustment Recorded to Revenue	2,503,620	1,768,684	1,614,860	6,036,153	4,628,456	5,611,775	5,565,723	4,205,545	4,194,563	2,351,261	3,472,300	2,616,841
Adjustment to Revenue	262	269	270	269	270	270	285	288	192	217	252	273

REVENUE BALANCING ACCOUNT - REVENUE TRACKER

AS PREVIOUSLY STATED

	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14
L1 Monthly Target Revenue	42,000,731	40,652,559	43,763,724	46,145,218	47,779,842	49,250,622	47,269,315	47,834,122	45,001,122	45,001,122	44,129,429	39,553,044
L2 Recorded Adjusted Revenue	39,226,528	38,772,031	40,347,419	40,290,887	42,838,703	43,680,012	41,909,165	42,572,492	40,070,690	41,178,802	40,155,441	37,871,094
L3 Target vs. Actual Revenue	2,774,203	1,880,528	3,416,305	5,854,331	4,940,879	5,570,610	5,360,150	5,261,630	4,930,432	3,822,320	3,973,988	1,681,950
L4 Reversal of Previous Year Accrual	(1,486,048)	(1,493,976)	(1,586,394)	(4,107,427)	(4,426,857)	(4,465,163)	(4,277,005)	(4,415,078)	(4,102,803)	(4,255,258)	(3,925,516)	(3,781,214)
L5 Net RBA Change	1,288,155	386,550	1,827,921	1,746,904	514,022	1,105,447	1,083,145	846,552	829,629	(432,938)	48,472	(2,079,284)
L6 Beginning RBA Balance	54,300,097	56,053,424	58,721,208	59,833,649	60,813,594	61,548,005	63,126,164	65,392,382	65,724,351	66,230,845	66,185,006	66,564,324
L7 End Balance Before Interest	55,580,252	58,439,974	59,549,129	60,562,433	61,427,618	62,652,252	64,238,969	65,399,369	65,751,880	66,233,478	66,203,478	66,485,260
L8 Balance Subject to Interest	54,944,175	58,246,899	57,835,169	59,709,051	61,170,605	62,099,528	63,677,537	64,976,116	65,346,165	66,014,476	66,209,242	65,524,892
L9 Interest	274,721	281,233	288,176	298,545	305,853	310,488	318,368	324,881	328,691	330,072	331,046	327,624
L10 Ending RBA Balance	55,682,873	58,721,208	58,937,305	60,880,998	61,733,470	62,962,750	64,547,207	65,724,273	66,080,671	66,126,079	66,504,524	64,812,884

Target vs Actual Difference:  
Recorded Adjusted Revenues - Unadjusted

Billing Adjustments	(270)	(278)	(273)	(265)	(265)	(268)	(267)	(243)	(201)	(208)	(241)	(212)
Revised Revenues	39,226,258	38,771,752	40,347,146	40,290,702	42,838,438	43,679,746	41,908,898	42,572,249	40,070,489	41,178,594	40,155,200	37,870,882
Target	42,000,731	40,652,559	43,763,724	46,145,218	47,779,842	49,250,622	47,269,315	47,834,122	45,001,122	45,001,122	44,129,429	39,553,044
	2,774,473	1,880,807	3,416,576	5,854,516	4,941,164	5,570,896	5,360,117	5,261,873	4,130,633	3,822,526	3,974,228	1,682,162

AS REVISED

	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14
L1 Monthly Target Revenue	42,000,731	40,652,559	43,763,724	46,145,218	47,779,842	49,250,622	47,269,315	47,834,122	45,001,122	45,001,122	44,129,429	39,553,044
L2 Recorded Adjusted Revenue	39,226,258	38,771,752	40,347,146	40,290,702	42,838,438	43,679,746	41,908,898	42,572,249	40,070,489	41,178,594	40,155,200	37,870,882
L3 Target vs. Actual Revenue	2,774,473	1,880,807	3,416,576	5,854,516	4,941,164	5,570,896	5,360,417	5,261,873	4,130,633	3,822,526	3,974,228	1,682,162
L4 Reversal of Previous Year Accrual	(1,486,048)	(1,493,976)	(1,586,394)	(4,107,427)	(4,426,857)	(4,465,163)	(4,277,005)	(4,415,078)	(4,102,803)	(4,255,258)	(3,925,516)	(3,781,214)
L5 Net RBA Change	1,288,425	386,828	1,828,194	1,747,089	514,307	1,105,733	1,103,912	846,785	830,547	(432,739)	40,713	(2,079,062)
L6 Beginning RBA Balance	54,300,524	56,060,153	58,720,251	59,840,001	60,821,270	61,554,405	63,134,990	65,401,474	65,733,271	66,240,111	66,194,427	66,574,234
L7 End Balance Before Interest	55,584,948	58,446,982	59,556,445	60,569,091	61,435,277	62,660,538	64,237,502	65,408,269	65,761,101	66,243,381	66,213,140	66,495,182
L8 Balance Subject to Interest	54,950,736	58,253,568	57,842,348	59,716,548	61,178,424	62,107,871	63,685,996	64,984,822	65,347,186	66,023,748	66,216,783	65,534,708
L9 Interest	274,754	281,268	289,212	299,583	306,892	310,538	318,130	324,924	328,736	330,119	331,094	327,874
L10 Ending RBA Balance	55,865,702	58,728,251	58,844,657	60,888,975	61,741,470	62,971,076	64,555,931	65,733,193	66,089,837	66,137,500	66,514,234	64,822,856

Revised Adjustment to Revenue  
RBA Adjustment Recorded to Revenue  
Adjustment to Revenue

	2,774,473	1,880,807	3,416,576	5,854,516	4,941,164	5,570,896	5,360,417	5,261,873	4,130,633	3,822,526	3,974,228	1,682,162
	2,774,203	1,880,528	3,416,305	5,854,231	4,940,879	5,570,610	5,360,150	5,261,630	4,130,432	3,822,320	3,973,988	1,681,950
	270	279	273	285	285	286	267	243	201	208	241	212

REVENUE BALANCING ACCOUNT - REVENUE TRACKER

AS PREVIOUSLY STATED

	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15
L1 Monthly Target Revenue	44,129,429	42,712,979	45,881,776	48,725,408	50,451,219	52,004,449	49,933,478	50,508,746	47,517,340	47,517,340	48,598,907	41,764,635
L2 Recorded Adjusted Revenue	40,445,741	39,688,701	41,326,526	43,277,375	45,900,584	46,563,555	45,456,699	46,103,656	43,033,461	42,808,961	41,131,344	38,968,462
L3 Target vs. Actual Revenue	3,683,688	2,824,278	4,555,250	5,448,033	4,550,635	5,440,894	4,476,777	4,404,979	4,480,979	4,708,379	5,465,563	2,796,173
L4 Reversal of Previous Year Accrual	(3,910,640)	(3,873,501)	(4,180,513)	(5,510,592)	(5,956,735)	(6,117,873)	(6,024,188)	(6,133,236)	(5,514,770)	(5,130,235)	(5,141,778)	(4,873,416)
L5 Net RBA Change	(228,952)	(1,049,273)	(484,737)	(770,599)	(1,406,100)	(877,079)	(62,267,427)	(1,818,346)	(1,030,891)	(721,856)	323,767	(2,077,243)
L6 Beginning RBA Balance	84,830,562	84,700,876	83,860,874	84,212,547	84,195,183	82,860,942	82,267,427	80,748,256	79,205,301	78,455,031	77,791,569	76,172,434
L7 End Balance Before Interest	84,603,610	83,651,603	84,195,611	84,141,988	82,793,063	82,163,863	80,728,910	79,028,912	77,474,910	76,733,175	75,115,356	73,402,651
L8 End Balance Subject to Interest	84,717,086	84,176,239	83,041,545	82,205,893	80,795,775	79,194,975	77,566,514	75,918,767	74,353,938	73,402,770	71,756,513	69,907,603
L9 Interest	94,379	93,590	96,936	97,185	96,868	95,701	94,785	93,399	92,287	91,756	91,630	90,907
L10 Ending RBA Balance	84,697,969	83,745,193	84,212,547	84,195,183	82,849,631	82,239,464	80,774,901	79,085,311	77,474,910	76,733,175	75,115,356	73,402,651

Target vs. Actual Difference:  
Recorded Adjusted Revenues - Unadjusted

Billing Adjustments	(266)	(266)	(266)	(266)	(266)	(266)	(266)	(266)	(266)	(266)	(266)	(266)
Revised Revenues	40,445,741	39,688,701	41,326,526	43,277,375	45,900,584	46,563,555	45,456,699	46,103,656	43,033,461	42,808,961	41,131,344	38,968,462
Target	44,129,429	42,712,979	45,881,776	48,725,408	50,451,219	52,004,449	49,933,478	50,508,746	47,517,340	47,517,340	48,598,907	41,764,635
	3,683,954	2,824,494	4,555,483	5,448,318	4,550,891	5,441,017	4,476,979	4,315,060	4,480,045	4,708,540	5,465,793	2,796,378

AS REVISED

	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15
L1 Monthly Target Revenue	44,129,429	42,712,979	45,881,776	48,725,408	50,451,219	52,004,449	49,933,478	50,508,746	47,517,340	47,517,340	48,598,907	41,764,635
L2 Recorded Adjusted Revenue	40,445,741	39,688,701	41,326,526	43,277,375	45,900,584	46,563,532	45,456,497	46,103,656	43,033,205	42,808,750	41,131,114	38,968,256
L3 Target vs. Actual Revenue	3,683,688	2,824,278	4,555,250	5,448,033	4,550,635	5,441,017	4,476,979	4,404,979	4,480,045	4,708,540	5,465,793	2,796,378
L4 Reversal of Previous Year Accrual	(3,910,640)	(3,873,501)	(4,180,513)	(5,510,592)	(5,956,735)	(6,117,873)	(6,024,188)	(6,133,236)	(5,514,770)	(5,130,235)	(5,141,778)	(4,873,416)
L5 Net RBA Change	(228,952)	(1,049,007)	(484,970)	(770,274)	(1,405,844)	(876,856)	(62,270,988)	(1,818,178)	(1,030,725)	(721,655)	324,017	(2,077,037)
L6 Beginning RBA Balance	84,840,534	84,711,129	83,871,408	84,223,374	84,204,235	82,872,100	82,270,988	80,660,042	79,217,768	78,467,173	77,803,823	76,182,480
L7 End Balance Before Interest	84,613,846	83,662,123	84,158,370	84,153,050	82,804,391	82,185,324	80,731,790	79,041,866	77,487,041	76,745,518	75,127,940	73,415,453
L8 End Balance Subject to Interest	84,723,191	84,186,826	83,048,052	82,212,583	80,796,618	79,194,975	77,566,514	75,918,767	74,353,938	73,402,770	71,756,513	69,907,603
L9 Interest	94,384	93,605	96,945	97,185	96,878	95,711	94,795	93,410	92,298	91,767	91,642	90,918
L10 Ending RBA Balance	84,708,242	83,755,728	84,223,324	84,210,235	82,860,969	82,251,035	80,786,585	79,095,276	77,487,041	76,745,518	75,127,940	73,415,453

Revised Adjustment to Revenue  
RBA Adjustment Recorded to Revenue  
Adjustment to Revenue

	3,683,954	2,824,494	4,555,483	5,448,318	4,550,891	5,441,017	4,476,979	4,315,060	4,480,045	4,708,540	5,465,793	2,796,378
	266	266	233	285	256	223	202	170	168	201	230	206

REVENUE BALANCING ACCOUNT - REVENUE TRACKER

AS PREVIOUSLY STATED

	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16
L1 Monthly Target Revenue	46,596,907	45,101,204	48,552,827	48,047,584	51,226,633	52,792,780	50,702,234	51,284,900	48,247,991	48,247,991	47,308,877	42,407,239
L2 Recorded Adjusted Revenue	42,716,788	42,125,471	43,533,632	41,994,944	47,281,491	49,462,250	47,377,603	45,860,541	46,028,249	45,122,645	43,233,334	41,404,808
L3 Target vs. Actual Revenue	3,880,119	2,975,733	5,019,195	6,052,640	3,945,142	3,330,530	3,324,631	5,424,359	2,219,742	3,125,346	4,075,543	1,002,431
L4 Reversal of Previous Year Actual	(5,192,949)	(5,327,198)	(5,401,784)	(3,665,156)	(5,301,934)	(5,577,653)	(5,375,270)	(5,110,863)	(5,072,650)	(4,877,639)	(4,634,357)	(4,381,515)
L5 Net RBA Change	(1,312,830)	(2,351,465)	(382,589)	2,387,484	(1,356,792)	(2,247,123)	(2,050,639)	(5,114,296)	(2,852,900)	(1,752,293)	(559,014)	(3,379,064)
L6 Beginning RBA Balance	56,110,976	54,910,778	52,827,239	52,304,205	54,740,597	53,446,938	51,199,813	49,586,125	48,757,235	46,900,320	45,086,941	44,379,617
L7 End Balance Before Interest	54,858,146	52,558,314	50,446,650	54,691,689	53,343,805	51,199,813	49,586,125	48,757,235	46,900,320	45,086,941	44,379,617	41,500,533
L8 End Balance Subject to Interest	33,913,845	32,829,740	32,033,118	32,681,898	33,026,599	31,964,349	30,712,661	30,183,944	29,435,416	28,055,078	27,374,083	26,384,817
L9 Interest	49,458	47,872	48,715	47,661	48,164	46,615	44,731	44,018	42,927	40,914	39,821	38,478
L10 Ending RBA Balance	54,907,604	52,607,168	52,281,365	54,739,350	53,431,969	51,246,428	49,228,416	48,610,143	48,000,102	45,086,941	44,309,848	41,539,011

Target vs Actual Difference:  
Recorded Adjusted Revenues - Unadjusted

Billing Adjustments	-	-	-	-	-	-	-	-	-	-	-	-
Revised Revenues	42,716,788	42,125,471	43,533,632	41,994,944	47,281,491	49,462,250	47,377,603	45,860,541	46,028,249	45,122,645	43,233,334	41,404,808
Target	3,880,119	2,975,733	5,019,195	6,052,640	3,945,142	3,330,530	3,324,631	5,424,359	2,219,742	3,125,346	4,075,543	1,002,431

AS REVISED

	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16
L1 Monthly Target Revenue	46,596,907	45,101,204	48,552,827	48,047,584	51,226,633	52,792,780	50,702,234	51,284,900	48,247,991	48,247,991	47,308,877	42,407,239
L2 Recorded Adjusted Revenue	42,716,788	42,125,471	43,533,632	41,994,944	47,281,491	49,462,250	47,377,603	45,860,541	46,028,249	45,122,645	43,233,334	41,404,808
L3 Target vs. Actual Revenue	3,880,119	2,975,733	5,019,195	6,052,640	3,945,142	3,330,530	3,324,631	5,424,359	2,219,742	3,125,346	4,075,543	1,002,431
L4 Reversal of Previous Year Actual	(5,192,949)	(5,327,198)	(5,401,784)	(3,665,156)	(5,301,934)	(5,577,653)	(5,375,270)	(5,110,863)	(5,072,650)	(4,877,639)	(4,634,357)	(4,381,515)
L5 Net RBA Change	(1,312,830)	(2,351,465)	(382,589)	2,387,484	(1,356,792)	(2,247,123)	(2,050,639)	(5,114,296)	(2,852,900)	(1,752,293)	(559,014)	(3,379,064)
L6 Beginning RBA Balance	56,110,976	54,910,778	52,827,239	52,304,205	54,740,597	53,446,938	51,199,813	49,586,125	48,757,235	46,900,320	45,086,941	44,379,617
L7 End Balance Before Interest	54,858,146	52,558,314	50,446,650	54,707,052	53,396,884	51,212,683	49,196,568	48,579,017	46,770,139	45,060,942	44,542,853	41,513,470
L8 End Balance Subject to Interest	33,921,973	32,834,574	32,040,960	32,689,744	33,034,154	31,972,212	30,690,550	30,191,820	29,443,289	28,062,967	27,381,880	26,392,720
L9 Interest	49,469	47,884	48,726	47,673	48,175	46,626	44,742	44,030	42,938	40,925	39,832	38,489
L10 Ending RBA Balance	54,920,428	52,620,022	52,304,212	54,752,209	53,444,039	51,259,309	49,241,306	48,623,047	48,013,077	45,101,867	44,582,765	41,531,959

Revised Adjustment to Revenue  
RBA Adjustment Recorded to Revenue  
Adjustment to Revenue

Revised Adjustment to Revenue	3,880,119	2,975,733	5,019,195	6,052,640	3,945,142	3,330,530	3,324,631	5,424,359	2,219,742	3,125,346	4,075,543	1,002,431
RBA Adjustment Recorded to Revenue	3,880,119	2,975,733	5,019,195	6,052,640	3,945,142	3,330,530	3,324,631	5,424,359	2,219,742	3,125,346	4,075,543	1,002,431
Adjustment to Revenue	-	-	-	-	-	-	-	-	-	-	-	-



REVENUE BALANCING ACCOUNT - REVENUE TRACKER

AS PREVIOUSLY STATED

	Mar-18	Apr-18	May-18
L1 Monthly Target Revenue	47,308,877	45,793,747	49,298,788
L2 Recorded Adjusted Revenue	43,945,263	42,792,611	46,044,763
L3 Target vs. Actual Revenue	3,363,614	3,001,136	3,252,025
L4 Reversal of Previous Year Accrual	(4,548,813)	(4,608,612)	(4,848,367)
L5 Net RBA Change	(1,185,399)	(1,607,476)	(1,596,362)
L6 Beginning RBA Balance	41,689,775	40,634,204	39,077,241
L7 End Balance Before Interest	40,484,378	39,076,728	37,460,879
L8 (L6 + L7) - 2 - [1]	25,093,965	24,332,432	23,384,676
L9 L8 x (6% or 1.75%) - 12	36,595	35,465	34,103
L10 L7 + L9	40,520,971	39,082,213	37,514,982

Target vs Actual Difference:			Total Billing Adjustment:
Recorded Adjusted Revenues - Unadjusted	43,945,263	42,792,611	46,044,763
Billing Adjustments	(4,200)	(3,281)	(3,559)
Revised Revenues	43,941,063	42,789,330	46,041,204
Target	47,308,877	45,793,747	49,298,788
	3,367,814	3,004,417	3,255,584

AS REVISED

	Mar-18	Apr-18	May-18
L1 Monthly Target Revenue	47,308,877	45,793,747	49,298,788
L2 Recorded Adjusted Revenue	43,941,063	42,789,330	46,041,204
L3 Target vs. Actual Revenue	3,367,814	3,004,417	3,255,584
L4 Reversal of Previous Year Accrual	(4,548,813)	(4,608,612)	(4,848,367)
L5 Net RBA Change	(1,181,189)	(1,604,195)	(1,592,803)
L6 Beginning RBA Balance	41,682,723	40,651,366	39,097,701
L7 End Balance Before Interest	40,501,524	39,447,171	37,504,898
L8 (L6 + L7) - 2 - [1]	25,103,728	24,343,918	23,398,294
L9 L8 x (6% or 1.75%) - 12	36,609	35,502	34,122
L10 L7 + L9	40,538,133	39,082,673	37,539,020

Revised Adjustment to Revenue	3,367,814	3,004,417	3,255,584
RBA Adjustment Recorded to Revenue	3,363,614	3,001,136	3,252,025
Adjustment to Revenue	4,200	3,281	3,559
			Total RBA Adjustment
			22,849

HECO-WP-B-009  
HAWAIIAN ELECTRIC COMPANY, INC.  
JUL 2016 ADJUSTMENT - MISCELLANEOUS CUSTOMER BILLING ADJUSTMENTS

REVENUE BALANCING ACCOUNT - REVENUE TRACKER

AS PREVIOUSLY STATED

	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16
L1 Monthly Target Revenue	52,792,780	50,702,234	51,284,900	48,247,991	48,247,991	47,308,677	42,407,239	47,308,677	45,793,747	49,296,788	50,202,656
L2 Recorded Adjusted Revenue	49,462,250	47,377,803	45,860,541	46,028,249	45,122,645	43,233,334	41,404,608	43,945,263	42,792,611	46,044,763	44,354,039
L3 Target vs. Actual Revenue	3,330,530	3,324,431	5,424,359	2,219,742	3,125,346	4,075,343	1,002,431	3,363,414	3,001,136	3,252,025	5,848,617
L4 Reversal of Previous Year Accrual	(5,377,653)	(5,375,270)	(5,110,063)	(5,072,650)	(4,877,639)	(4,634,357)	(4,378,964)	(4,185,399)	(4,008,812)	(3,848,367)	(3,782,632)
L5 Net RBA Change	(2,247,123)	(2,050,839)	3,142,296	(2,852,900)	(1,752,293)	(359,014)	(3,379,064)	(1,185,399)	(1,607,476)	(1,596,362)	2,095,985
L6 Beginning RBA Balance	53,446,936	51,234,324	49,251,828	46,101,143	46,000,320	45,088,941	44,879,617	44,688,775	44,634,204	39,077,241	37,537,831
L7 End Balance Before Interest	51,199,813	49,183,685	48,566,125	46,757,235	45,048,027	44,526,927	41,500,533	40,484,376	39,078,728	37,480,679	35,993,816
L8 Balance Subject to Interest	31,966,349	30,672,081	30,193,944	29,435,418	28,055,078	27,374,000	26,304,817	25,090,985	24,332,432	23,384,678	23,559,681
L9 Interest	46,617	44,731	44,016	42,927	40,914	39,921	38,478	36,595	35,485	34,103	34,356
L10 Ending RBA Balance	51,246,428	49,228,416	48,610,143	46,800,162	45,086,941	44,569,848	41,539,011	40,520,971	39,062,213	37,514,982	35,828,174

Total Billion  
Adjustment  
(42,035)

Target vs Actual Difference:  
Recorded Adjusted Revenues - Unadjusted

Revised Revenues	49,462,250	47,377,803	45,860,541	46,028,249	45,122,645	43,233,334	41,404,608	43,945,263	42,792,611	46,044,763	44,354,039
Target	49,462,250	47,377,803	45,860,541	46,028,249	45,122,645	43,233,334	41,404,608	43,945,263	42,792,611	46,044,763	44,354,039

AS REVISED

	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16
L1 Monthly Target Revenue	52,792,780	50,702,234	51,284,900	48,247,991	48,247,991	47,308,677	42,407,239	47,308,677	45,793,747	49,296,788	50,202,656
L2 Recorded Adjusted Revenue	49,462,250	47,377,803	45,860,541	46,028,249	45,122,645	43,233,334	41,404,608	43,945,263	42,792,611	46,044,763	44,354,039
L3 Target vs. Actual Revenue	3,330,530	3,324,431	5,424,359	2,219,742	3,125,346	4,075,343	1,002,431	3,363,414	3,001,136	3,252,025	5,848,617
L4 Reversal of Previous Year Accrual	(5,377,653)	(5,375,270)	(5,110,063)	(5,072,650)	(4,877,639)	(4,634,357)	(4,378,964)	(4,185,399)	(4,008,812)	(3,848,367)	(3,782,632)
L5 Net RBA Change	(2,247,123)	(2,050,839)	3,142,296	(2,852,900)	(1,752,293)	(359,014)	(3,379,064)	(1,185,399)	(1,607,476)	(1,596,362)	2,095,985
L6 Beginning RBA Balance	53,446,936	51,234,324	49,251,828	46,101,143	46,000,320	45,088,941	44,879,617	44,688,775	44,634,204	39,077,241	37,537,831
L7 End Balance Before Interest	51,205,818	49,185,897	48,584,150	46,781,279	45,078,094	44,566,023	41,542,603	40,526,541	39,078,728	37,523,119	36,036,093
L8 Balance Subject to Interest	31,966,184	30,678,165	30,193,121	29,446,270	28,071,611	27,394,300	26,408,720	25,118,744	24,358,213	23,410,482	23,585,688
L9 Interest	46,617	44,739	44,032	42,945	40,938	39,950	38,513	36,633	35,522	34,140	34,396
L10 Ending RBA Balance	51,252,435	49,240,436	48,628,182	46,824,224	45,119,032	44,605,973	41,581,176	40,563,174	39,104,453	37,557,259	35,870,489

Total RBA  
Adjustment  
42,035

Revised Adjustment to Revenue  
RBA Adjustment Recorded to Revenue  
Adjustment to Revenue

Note [1]  
In connection with Decision and Order No. 31908 on Schedule A of the Decoupling Investigation, issued on February 7, 2014, the Company received approval on April 28, 2014 from the Internal Revenue Service to change its tax treatment of RBA revenues from the book accrual method of revenue balancing account ("RBA") revenue recognition to a recognition method based on when rates are adjusted and revenues are collected, effective January 1, 2014. Accordingly, starting with May 2014, interest is calculated based on a net-of-income tax RBA balance, and the following income tax factor is used in the calculation.

Income Tax Factor ( 1 / 1-tax rate ) 1.636929121

Note [2]  
Totals may not add exactly due to rounding.

Note [3]  
The Company recorded adjustments to the RBA related to miscellaneous customer billing adjustments that were processed in July 2016. The Company recalculated the RBA based on the billing adjustment in the prior months incurred. No interest impact was calculated as the adjustment did not meet the revenue balancing account provision limit.

HECO-WP-B-010  
HAWAIIAN ELECTRIC COMPANY, INC.  
SEP 2016 ADJUSTMENT - MISCELLANEOUS CUSTOMER BILLING ADJUSTMENTS

REVENUE BALANCING ACCOUNT - REVENUE TRACKER

AS PREVIOUSLY STATED

	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16
L1 Monthly Target Revenue	51,284,900	48,247,991	48,247,991	47,308,677	42,407,239	47,308,677	45,793,747	49,296,786	50,202,656	51,980,790	53,561,111
L2 Recorded Adjusted Revenue	45,680,136	46,028,249	45,122,645	43,233,334	41,004,808	43,945,263	42,792,611	46,044,763	44,354,039	47,632,161	49,894,341
L3 Target vs. Actual Revenue	5,604,762	2,219,742	3,125,346	4,075,343	1,402,431	3,363,414	3,001,136	3,252,025	5,848,617	4,348,629	3,666,770
L4 Reversal of Previous Year Accrual	(5,110,063)	(5,072,650)	(4,877,639)	(4,634,357)	(4,381,515)	(4,148,813)	(3,908,817)	(3,658,387)	(3,392,632)	(3,121,765)	(2,846,840)
L5 Net RBA Change	49,251,829	48,950,538	48,764,569	48,392,318	47,020,285	47,796,450	46,883,794	45,386,397	44,061,407	42,510,396	41,043,531
L6 Beginning RBA Balance	49,545,528	46,721,509	44,991,446	44,473,305	41,430,208	40,386,369	38,912,989	37,352,178	35,533,317	33,440,717	31,169,121
L7 End Balance Before Interest	30,177,958	29,418,515	28,026,875	27,339,693	26,348,025	25,042,551	23,310,595	21,461,121	19,470,810	17,378,739	15,169,121
L8 Balance Subject to Interest	44,010	42,902	40,873	39,870	38,421	36,520	35,390	34,240	33,095	31,945	30,795
L9 Interest	49,590,538	46,764,411	45,032,310	44,513,175	41,468,828	40,422,889	38,948,379	37,386,173	35,533,317	33,440,717	31,169,121
L10 Ending RBA Balance	49,610,143	46,806,162	45,068,941	44,569,848	41,535,011	40,520,971	39,062,213	37,514,982	35,828,174	34,240,717	32,520,833

Total RBA  
Adjustment  
144,043

Target vs Actual Difference:  
Recorded Adjusted Revenues - Unadjusted  
Billing Adjustments

Revised Revenues	45,680,136	46,044,368	45,143,476	43,233,334	41,018,458	43,972,689	42,808,268	46,059,530	44,362,064	47,632,161	49,902,070
Target	51,284,900	48,247,991	48,247,991	47,308,677	42,407,239	47,308,677	45,793,747	49,296,786	50,202,656	51,980,790	53,561,111
	5,604,762	2,203,622	3,104,515	4,075,343	988,780	3,335,768	2,985,478	3,237,158	5,840,652	4,348,629	3,678,041

AS REVISED

L1 Monthly Target Revenue	51,284,900	48,247,991	48,247,991	47,308,677	42,407,239	47,308,677	45,793,747	49,296,786	50,202,656	51,980,790	53,561,111
L2 Recorded Adjusted Revenue	45,680,136	46,044,368	45,143,476	43,233,334	41,018,458	43,972,689	42,808,268	46,059,530	44,362,064	47,632,161	49,902,070
L3 Target vs. Actual Revenue	5,604,762	2,203,622	3,104,515	4,075,343	988,780	3,335,768	2,985,478	3,237,158	5,840,652	4,348,629	3,678,041
L4 Reversal of Previous Year Accrual	(5,110,063)	(5,072,650)	(4,877,639)	(4,634,357)	(4,381,515)	(4,148,813)	(3,908,817)	(3,658,387)	(3,392,632)	(3,121,765)	(2,846,840)
L5 Net RBA Change	294,659	(2,859,028)	(1,773,124)	(559,014)	(3,392,735)	(1,213,025)	(1,602,133)	(1,811,279)	(2,048,020)	(2,189,24)	(2,444,840)
L6 Beginning RBA Balance	49,251,829	48,950,538	48,764,569	48,392,318	47,020,285	47,796,450	46,883,794	45,386,397	44,061,407	42,510,396	41,043,531
L7 End Balance Before Interest	49,545,528	46,721,509	44,991,446	44,473,305	41,430,208	40,386,369	38,912,989	37,352,178	35,533,317	33,440,717	31,169,121
L8 Balance Subject to Interest	30,177,958	29,418,515	28,026,875	27,339,693	26,348,025	25,042,551	23,310,595	21,461,121	19,470,810	17,378,739	15,169,121
L9 Interest	44,010	42,902	40,873	39,870	38,421	36,520	35,390	34,240	33,095	31,945	30,795
L10 Ending RBA Balance	49,590,538	46,764,411	45,032,310	44,513,175	41,468,828	40,422,889	38,948,379	37,386,173	35,533,317	33,440,717	31,169,121

Revised Adjustment to Revenue	5,604,762	2,203,622	3,104,515	4,075,343	988,780	3,335,768	2,985,478	3,237,158	5,840,652	4,348,629	3,678,041
RBA Adjustment Recorded to Revenue	5,625,359	2,219,742	3,125,346	4,075,343	1,002,431	3,363,414	3,001,136	3,252,025	5,868,617	4,368,629	3,686,770
Adjustment to Revenue	(19,597)	(16,120)	(20,831)	(13,651)	(13,651)	(27,626)	(15,657)	(14,867)	(7,965)	(7,729)	(144,043)

Revised Interest	44,010	42,902	40,873	39,870	38,421	36,520	35,390	34,240	33,095	31,945	30,795
Interest Recorded	44,018	42,977	40,914	39,921	38,478	36,595	35,485	34,358	33,232	32,105	30,978
Adjustment to Interest	(8)	(75)	(41)	(51)	(57)	(75)	(95)	(108)	(116)	(122)	(125)

Note [1]  
In connection with Decision and Order No. 31908 on Schedule A of the Decoupling Investigation, issued on February 7, 2014, the Company received approval on April 28, 2014 from the Internal Revenue Service to change its tax treatment of RBA revenues from the book accrual method of revenue balancing account ("RBA") revenue recognition to a recognition method based on when rates are adjusted and revenues are collected, effective January 1, 2014. Accordingly, starting with May 2014, interest is calculated based on a net-income tax RBA balance, and the following income tax factor is used in the calculation.

Income Tax Factor (1 / 1-tax rate)

Note [2]  
Totals may not add exactly due to rounding.

Note [3]  
The Company recorded adjustments to the RBA related to miscellaneous customer billing adjustments that were processed in September 2016. The Company recalculated the RBA and interest based on the billing adjustments in the prior months incurred.

REVENUE BALANCING ACCOUNT - REVENUE TRACKER

AS PREVIOUSLY STATED

	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16
L1 Monthly Target Revenue	41,764,635	48,596,907	45,101,204	48,552,827	48,047,584	51,226,633	52,792,760	50,702,234	51,284,900	48,247,991	48,247,991	47,308,677
L2 Recorded Adjusted Revenue	38,968,462	42,716,788	42,125,471	43,533,632	41,994,944	47,281,491	49,462,250	47,377,603	45,860,541	48,028,249	45,122,645	43,233,334
L3 Target vs. Actual Revenue	2,796,173	3,880,119	2,975,733	5,019,195	6,052,640	3,945,142	3,330,510	3,324,631	5,424,359	2,219,742	3,125,346	4,075,343
L4 Reversal of Previous Year Accrual	(4,873,416)	(5,192,949)	(5,327,198)	(5,401,784)	(3,665,156)	(5,301,934)	(5,577,653)	(5,375,270)	(5,110,063)	(5,072,650)	(4,877,639)	(4,634,357)
L5 Net RBA Change	(2,077,243)	(1,312,830)	(2,351,465)	(382,589)	2,387,484	(1,356,792)	(2,247,123)	(2,050,639)	314,298	(2,852,908)	(1,752,293)	(559,014)
L6 Beginning RBA Balance	58,179,894	56,170,978	54,910,779	52,627,239	52,304,205	54,740,597	53,446,936	51,234,324	49,251,829	49,610,143	48,800,320	45,068,941
L7 End Balance Before Interest	56,102,651	54,858,146	52,559,314	52,244,650	54,591,889	53,383,805	51,199,613	49,183,685	48,586,125	48,757,235	45,048,027	44,529,927
L8 Balance Subject to Interest	34,907,638	33,913,845	32,826,740	32,033,116	32,681,896	33,026,599	31,964,349	30,672,681	30,183,944	29,435,416	28,055,078	27,317,083
L9 Interest	50,907	49,458	47,872	46,715	47,661	48,166	46,617	44,731	44,018	42,927	40,914	39,921
L10 Ending RBA Balance	56,153,558	54,907,604	52,607,186	52,291,365	54,739,550	53,431,969	51,246,428	49,228,416	48,610,143	48,600,162	45,068,941	44,569,848

Target vs Actual Differences:

Recorded Adjusted Revenues - Unadjusted	38,968,462	42,716,788	42,125,471	43,533,632	41,994,944	47,281,491	49,462,250	47,377,603	45,860,541	48,028,249	45,122,645	43,233,334
Billing Adjustments 1	(114)	(285)	(285)	(285)	(285)	(285)	(291)	(285)	(285)	(285)	(285)	(286)
Billing Adjustments 2				(287)	(279)	(279)		(279)	(276)	(282)	(282)	(287)
Revised Revenues	38,861,348	42,716,503	42,125,186	43,533,064	41,994,379	47,280,927	49,461,960	47,377,039	45,859,980	48,027,681	45,122,074	43,232,765
Target	2,796,287	3,880,404	2,976,018	5,019,763	6,053,205	3,945,706	3,331,100	3,325,195	5,424,920	2,220,310	3,125,917	4,075,912

AS REVISED

	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16
L1 Monthly Target Revenue	41,764,635	48,596,907	45,101,204	48,552,827	48,047,584	51,226,633	52,792,760	50,702,234	51,284,900	48,247,991	48,247,991	47,308,677
L2 Recorded Adjusted Revenue	38,968,348	42,716,503	42,125,186	43,533,064	41,994,379	47,280,927	49,461,960	47,377,039	45,859,980	48,027,681	45,122,074	43,232,765
L3 Target vs. Actual Revenue	2,796,287	3,880,404	2,976,018	5,019,763	6,053,205	3,945,706	3,331,100	3,325,195	5,424,920	2,220,310	3,125,917	4,075,912
L4 Reversal of Previous Year Accrual	(4,873,416)	(5,192,949)	(5,327,198)	(5,401,784)	(3,665,156)	(5,301,934)	(5,577,653)	(5,375,270)	(5,110,063)	(5,072,650)	(4,877,639)	(4,634,357)
L5 Net RBA Change	(2,077,129)	(1,312,545)	(2,351,180)	(382,021)	2,386,049	(1,356,228)	(2,246,533)	(2,050,075)	314,857	(2,852,340)	(1,751,722)	(558,445)
L6 Beginning RBA Balance	58,179,894	56,171,090	54,911,176	52,627,925	52,305,460	54,742,417	53,449,323	51,237,283	49,255,355	49,614,235	48,804,583	45,094,179
L7 End Balance Before Interest	56,102,765	54,858,545	52,559,999	52,245,904	54,693,568	53,386,190	51,202,770	49,187,208	48,570,213	48,761,894	45,053,261	44,535,734
L8 Balance Subject to Interest	34,907,638	33,914,002	32,827,071	32,033,711	32,682,835	33,027,863	31,965,982	30,674,661	30,186,270	29,438,089	28,058,101	27,317,457
L9 Interest	50,907	49,458	47,873	46,716	47,662	48,166	46,617	44,734	44,022	42,931	40,918	39,925
L10 Ending RBA Balance	56,153,672	54,908,003	52,607,872	52,292,620	54,741,170	53,434,356	51,249,387	49,231,942	48,614,235	48,804,825	45,094,179	44,575,659

Revised Adjustment to Revenue	2,796,287	3,880,404	2,976,018	5,019,763	6,053,205	3,945,706	3,331,100	3,325,195	5,424,920	2,220,310	3,125,917	4,075,912
RBA Adjustment Recorded to Revenue	2,796,173	3,880,119	2,975,733	5,019,195	6,052,640	3,945,142	3,330,510	3,324,631	5,424,359	2,219,742	3,125,346	4,075,343
Adjustment to Revenue	114	285	285	568	565	564	570	564	561	568	571	569

Note [1]

In connection with Decision and Order No. 31908 on Schedule A of the Decoupling Investigation, issued on February 7, 2014, the Company received approval on April 28, 2014 from the Internal Revenue Service to change its tax treatment of RBA revenues from the book accrual method of revenue balancing account ("RBA") revenue recognition to a recognition method based on when rates are adjusted and revenues are collected, effective January 1, 2014. Accordingly, starting with May 2014, interest is calculated based on a net-of-income tax RBA balance, and the following income tax factor is used in the calculation.

$$\text{Income Tax Factor} = 1 / (1.036929121)$$

Note [2]

Totals may not add exactly due to rounding.

Note [3]

The Company recorded adjustments to the RBA related to customer billing adjustments due to a J to G rate change that were processed in October 2016. The Company recalculated the RBA based on the billing adjustment in the prior months incurred. No interest impact was calculated as the adjustment did not meet the interest recalculation threshold of \$50,000 per the Revenue Balancing Account provision tariff.

REVENUE BALANCING ACCOUNT - REVENUE TRACKER

AS PREVIOUSLY STATED

	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16
Monthly Target Revenue	42,407,239	47,308,677	45,793,747	49,296,788	50,202,656	51,880,780	53,581,111	51,447,350
Recorded Adjusted Revenue	41,404,808	43,944,263	42,792,611	46,044,763	44,354,039	47,632,161	49,694,341	46,441,855
Target vs. Actual Revenue	1,002,431	3,363,414	3,001,136	3,252,025	5,848,617	4,248,619	3,886,770	5,005,495
Reversal of Previous Year Accrual	(4,361,515)	(4,548,813)	(4,608,812)	(4,848,387)	(3,792,632)	(4,131,705)	(4,323,881)	(4,085,884)
Net RBA Change	(3,379,084)	(1,185,399)	(1,607,476)	(1,596,362)	2,055,985	216,914	(437,111)	919,631
Beginning RBA Balance	44,879,617	41,693,775	40,634,204	39,077,241	37,537,831	39,670,209	39,922,572	39,375,965
End Balance Before Interest	41,500,533	40,484,376	39,026,728	37,480,879	35,993,816	39,887,133	39,465,461	40,295,598
Balance Subject to Interest	26,384,617	25,093,885	24,332,432	23,344,678	23,559,861	24,300,780	24,255,164	24,335,678
Interest	38,478	36,595	35,485	34,103	34,358	35,439	35,372	35,490
Ending RBA Balance	41,539,011	40,520,971	39,062,213	37,514,982	35,628,174	39,922,572	39,520,833	40,331,066

Total Billing  
Adjustment  
(5,545)  
(4,603)  
(10,348)

Target vs Actual Difference:  
Recorded Adjusted Revenues - Unadjusted  
Billing Adjustments 1  
Billing Adjustments 2  
Revised Revenues  
Target

41,404,808	43,944,263	42,792,611	46,044,763	44,354,039	47,632,161	49,694,341	46,441,855
(285)	(286)	(285)	(285)	(285)	(285)	(285)	(286)
(279)	(285)	(285)	(285)	(285)	(285)	(285)	(286)
41,404,244	43,944,691	42,792,040	46,044,192	44,353,468	47,631,590	49,693,770	46,441,282
42,407,239	47,308,677	45,793,747	49,296,788	50,202,656	51,880,780	53,581,111	51,447,350
1,002,995	3,363,986	3,001,707	3,252,596	5,849,188	4,249,200	3,887,341	5,006,066

AS REVISED

	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16
Monthly Target Revenue	42,407,239	47,308,677	45,793,747	49,296,788	50,202,656	51,880,780	53,581,111	51,447,350
Recorded Adjusted Revenue	41,404,244	43,944,691	42,792,040	46,044,192	44,353,468	47,631,590	49,693,770	46,441,282
Target vs. Actual Revenue	1,002,995	3,363,986	3,001,707	3,252,596	5,849,188	4,249,200	3,887,341	5,006,066
Reversal of Previous Year Accrual	(4,361,515)	(4,548,813)	(4,608,812)	(4,848,387)	(3,792,632)	(4,131,705)	(4,323,881)	(4,085,884)
Net RBA Change	(3,379,520)	(1,184,827)	(1,606,905)	(1,595,791)	2,056,556	217,495	(436,540)	920,204
Beginning RBA Balance	44,883,428	41,676,155	40,641,162	39,084,776	37,545,944	39,678,900	39,931,842	39,385,815
End Balance Before Interest	41,506,908	40,491,328	39,034,257	37,488,985	35,997,489	39,896,395	39,495,302	40,308,019
Balance Subject to Interest	26,388,539	25,098,058	24,336,857	23,359,455	23,564,932	24,306,274	24,261,021	24,341,871
Interest	38,483	36,601	35,491	34,110	34,366	35,447	35,381	35,499
Ending RBA Balance	41,545,391	40,527,929	39,069,748	37,523,095	35,636,855	39,931,842	39,530,683	40,341,518

Revised Adjustment to Revenue  
RBA Adjustment Recorded to Revenue  
Adjustment to Revenue

Total RBA  
Adjustment  
5,005,095  
10,348

1,002,995	3,363,986	3,001,707	3,252,596	5,849,188	4,249,200	3,887,341	5,006,066
1,002,431	3,363,414	3,001,136	3,252,025	5,848,617	4,248,619	3,886,770	5,005,495
564	572	571	571	571	571	571	573

HECO-WP-B-012  
HAWAIIAN ELECTRIC COMPANY, INC.  
NOV 2018 ADJUSTMENT - MISCELLANEOUS & P to J RATE CHANGE CUSTOMER BILLING ADJUSTMENTS

REVENUE BALANCING ACCOUNT - REVENUE TRACKER

AS PREVIOUSLY STATED

	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16
L1 Monthly Target Revenue	48,247,991	47,308,677	47,308,677	47,308,677	47,308,677	47,308,677	47,308,677	47,308,677	47,308,677	47,308,677	47,308,677	47,308,677
L2 Recorded Adjusted Revenue	48,028,249	45,122,845	43,233,334	41,404,808	43,845,283	42,782,611	48,044,783	44,354,038	47,832,161	49,694,341	51,447,350	52,040,061
L3 Target vs. Actual Revenue	2,219,742	3,125,346	4,075,343	1,902,431	3,983,414	3,001,136	3,252,025	5,846,617	4,348,029	3,886,770	5,005,495	4,917,480
L4 Reversal of Previous Year Accrual	(5,072,650)	(4,877,839)	(4,834,357)	(4,381,515)	(4,548,813)	(4,808,612)	(4,846,387)	(3,762,832)	(4,131,705)	(4,323,681)	(4,085,804)	(4,075,714)
L5 Net RBA Change	(2,852,908)	(1,752,493)	(559,014)	(1,185,399)	(1,160,476)	(1,800,387)	(1,596,362)	2,065,985	216,924	(437,111)	39,375,965	941,766
L6 Beginning RBA Balance	48,610,143	48,800,320	45,088,941	44,819,817	41,860,776	40,634,264	39,071,241	37,537,331	36,887,133	35,485,401	34,335,076	33,440,334
L7 End Balance Before Interest	48,757,235	45,044,027	44,529,927	41,500,533	40,484,378	39,028,728	37,480,879	35,993,616	34,887,133	33,485,401	32,295,596	31,161,200
L8 Balance Subject to Interest	28,435,416	25,055,076	27,374,083	26,384,817	25,953,985	24,332,452	23,384,678	23,598,061	24,300,760	24,255,164	24,333,076	24,901,089
L9 Interest	42,027	40,814	39,821	38,476	36,385	34,465	34,103	34,356	35,439	35,372	35,490	36,316
L10 Ending RBA Balance	48,600,162	45,088,941	44,569,848	41,539,011	40,520,971	39,062,213	37,514,982	36,022,174	35,922,572	35,520,833	35,119,515	34,129,515

Target vs Actual Difference:

Recorded Adjusted Revenues - Unadjusted	48,028,249	45,122,845	43,233,334	41,404,808	43,845,283	42,782,611	48,044,783	44,354,038	47,832,161	49,694,341	51,447,350	52,040,061
Billing Adjustments 1	(864)	(2,328)	(2,746)	(2,408)	(2,408)	(2,748)	(2,351)	(2,413)	(2,657)	(2,403)	(2,566)	(3,024)
Billing Adjustments 2	48,027,385	45,120,317	43,230,586	41,402,400	43,842,855	42,780,863	48,042,432	44,351,625	47,829,504	49,691,938	51,444,784	52,037,037
Revised Revenues	48,247,991	47,308,677	47,308,677	47,308,677	47,308,677	47,308,677	47,308,677	47,308,677	47,308,677	47,308,677	47,308,677	47,308,677
Target	2,220,626	3,127,674	4,076,061	1,904,639	3,983,622	3,003,864	3,254,360	5,851,030	4,351,286	3,886,173	5,010,581	4,917,480

Total Billing Adjustment  
(15,614)  
(29,538)  
(35,150)  
4,924,212

AS REVISED

	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16
L1 Monthly Target Revenue	48,247,991	47,308,677	47,308,677	47,308,677	47,308,677	47,308,677	47,308,677	47,308,677	47,308,677	47,308,677	47,308,677	47,308,677
L2 Recorded Adjusted Revenue	48,027,385	45,120,317	43,230,586	41,402,400	43,842,855	42,780,863	48,042,432	44,351,625	47,829,504	49,691,938	51,444,784	52,037,037
L3 Target vs. Actual Revenue	2,220,626	3,127,674	4,076,061	1,904,639	3,983,622	3,003,864	3,254,360	5,851,030	4,351,286	3,886,173	5,010,581	4,917,480
L4 Reversal of Previous Year Accrual	(5,072,650)	(4,877,839)	(4,834,357)	(4,381,515)	(4,548,813)	(4,808,612)	(4,846,387)	(3,762,832)	(4,131,705)	(4,323,681)	(4,085,804)	(4,075,714)
L5 Net RBA Change	(2,852,024)	(1,749,965)	(556,268)	(1,182,061)	(1,160,476)	(1,800,387)	(1,596,362)	2,065,985	216,924	(437,111)	39,375,965	941,766
L6 Beginning RBA Balance	48,610,143	48,801,204	45,088,941	44,819,817	41,860,776	40,634,264	39,071,241	37,537,331	36,887,133	35,485,401	34,335,076	33,440,334
L7 End Balance Before Interest	48,758,119	45,051,239	44,535,888	41,500,905	40,485,192	39,040,271	37,486,785	35,993,616	34,887,133	33,485,401	32,295,596	31,161,200
L8 Balance Subject to Interest	28,435,680	28,050,329	27,376,865	26,389,196	25,966,839	24,339,866	23,393,871	23,579,313	24,312,000	24,268,749	24,335,144	24,921,189
L9 Interest	42,027	40,815	39,825	38,484	36,604	34,496	34,118	34,373	35,456	35,392	35,513	36,343
L10 Ending RBA Balance	48,801,046	45,092,154	44,575,813	41,547,389	40,531,789	39,075,767	37,530,884	36,046,504	35,943,576	35,544,280	35,149,822	34,154,811

Revised Adjustment to Revenue	2,220,626	3,127,674	4,076,061	1,904,639	3,983,622	3,003,864	3,254,360	5,851,030	4,351,286	3,886,173	5,010,581	4,924,212
RBA Adjustment: Recorded to Revenue	2,219,742	3,125,346	4,075,343	1,902,431	3,983,414	3,001,136	3,252,025	5,846,617	4,348,029	3,886,770	5,005,495	4,917,480
Adjustment to Revenue	884	2,328	2,746	2,408	2,408	2,748	2,335	2,413	2,657	2,403	5,086	6,732

Total RBA Adjustment  
(35,150)  
35,150

Note [1]  
In connection with Decision and Order No. 31908 on Schedule A of the Decoupling Investigation, issued on February 7, 2014, the Company received approval on April 28, 2014 from the Internal Revenue Service to change its tax treatment of RBA revenues from the book accrual method of revenue balancing account ("RBA") revenue recognition to a recognition method based on when rates are adjusted and revenues are collected, effective January 1, 2014. Accordingly, starting with May 2014, interest is calculated based on a net-of-income tax RBA balance, and the following income tax factor is used in the calculation.

Income Tax Factor (1 / 1-tax rate)

1.038928121

Note [2]  
Totals may not add exactly due to rounding.

Note [3]  
The Company recorded adjustments to the RBA related to miscellaneous and P to J rate change customer billing adjustments that were processed in November 2016. The Company recalculated the RBA based on the billing adjustment in the prior months incurred. No interest impact was calculated as the adjustment did not meet the interest recalculation threshold of \$50,000 per the Revenue Balancing Account provision (a). No

HECO-WP-B-013  
HAWAIIAN ELECTRIC COMPANY, INC.  
NOV 2016 ADJUSTMENT - MISCELLANEOUS CUSTOMER BILLING ADJUSTMENTS

REVENUE BALANCING ACCOUNT - REVENUE TRACKER

AS PREVIOUSLY STATED

	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sept-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12
L1 Monthly Target Revenue	38,452,740	35,823,429	37,102,931	39,046,559	41,350,321	45,888,046	44,070,248	44,577,970	41,937,817	41,937,817	41,125,462	38,860,599
L2 Recorded Adjusted Revenue	37,208,214	35,823,429	37,102,931	38,409,559	38,728,938	38,485,482	38,395,130	38,799,920	38,574,222	39,861,425	39,527,599	37,356,068
L3 Target vs. Actual Revenue	(753,474)	(141,456)	709,898	2,636,970	2,621,383	7,412,564	5,885,118	5,778,050	5,363,595	1,976,392	1,587,863	(495,469)
L4 Reversal of Previous Year Accrual	(753,474)	(141,456)	709,898	2,636,970	2,621,383	7,412,564	5,885,118	5,778,050	5,363,595	1,976,392	1,587,863	(495,469)
L5 Net RBA Change	(753,474)	(141,456)	709,898	2,636,970	2,621,383	7,412,564	5,885,118	5,778,050	5,363,595	1,976,392	1,587,863	(495,469)
L6 Beginning RBA Balance	(753,474)	(837,054)	(833,048)	(278,202)	2,365,980	5,005,748	12,461,970	18,207,533	24,035,403	18,705,434	20,760,284	22,488,053
L7 End Balance Before Interest	(753,474)	(837,054)	(833,048)	(278,202)	2,365,980	5,005,748	12,461,970	18,207,533	24,035,403	18,705,434	20,760,284	22,488,053
L8 Balance Subject to Interest	(753,474)	(837,054)	(833,048)	(278,202)	2,365,980	5,005,748	12,461,970	18,207,533	24,035,403	18,705,434	20,760,284	22,488,053
L9 Interest	(1,884)	(4,537)	(3,137)	5,213	16,369	43,567	70,451	105,482	133,587	88,480	107,898	111,192
L10 Ending RBA Balance	(755,358)	(883,048)	(883,048)	(278,202)	2,365,980	5,005,748	12,461,970	18,207,533	24,035,403	20,760,284	22,488,053	22,101,776

Target vs Actual Difference:  
Recorded Adjusted Revenue - Unadjusted  
Billing Adjustments 1

Billing Adjustments 2	(64)	(76)	(79)	(59)	(60)	(74)	(74)	(71)	(70)	(64)	(81)	(80)
Revised Revenues	(147)	(150)	(158)	(177)	(179)	(223)	(195)	(198)	(203)	(195)	(202)	(203)
Target	37,208,003	35,823,193	37,102,694	38,409,353	38,728,698	38,485,182	38,384,861	38,799,653	38,573,946	39,861,167	39,527,335	37,355,804
	38,452,740	35,823,193	37,102,694	38,409,353	41,350,321	45,888,046	44,070,248	44,577,970	41,937,817	41,937,817	41,125,462	38,860,599
	(753,263)	(141,220)	710,223	2,637,208	2,621,623	7,412,864	5,885,387	5,778,317	5,363,869	1,976,650	1,588,126	(495,205)

AS REVISED

	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sept-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12
L1 Monthly Target Revenue	38,452,740	35,823,429	37,102,931	39,046,559	41,350,321	45,888,046	44,070,248	44,577,970	41,937,817	41,937,817	41,125,462	38,860,599
L2 Recorded Adjusted Revenue	37,208,003	35,823,193	37,102,694	38,409,353	38,728,698	38,485,182	38,384,861	38,799,653	38,573,946	39,861,167	39,527,335	37,355,804
L3 Target vs. Actual Revenue	(753,263)	(141,220)	710,223	2,637,208	2,621,623	7,412,864	5,885,387	5,778,317	5,363,869	1,976,650	1,588,126	(495,205)
L4 Reversal of Previous Year Accrual	(753,263)	(141,220)	710,223	2,637,208	2,621,623	7,412,864	5,885,387	5,778,317	5,363,869	1,976,650	1,588,126	(495,205)
L5 Net RBA Change	(753,263)	(141,220)	710,223	2,637,208	2,621,623	7,412,864	5,885,387	5,778,317	5,363,869	1,976,650	1,588,126	(495,205)
L6 Beginning RBA Balance	(753,263)	(836,842)	(832,598)	(275,513)	2,366,909	5,006,921	12,471,454	18,209,282	24,037,438	18,707,754	20,762,884	22,488,020
L7 End Balance Before Interest	(753,263)	(836,842)	(832,598)	(275,513)	2,366,909	5,006,921	12,471,454	18,209,282	24,037,438	18,707,754	20,762,884	22,488,020
L8 Balance Subject to Interest	(753,263)	(836,842)	(832,598)	(275,513)	2,366,909	5,006,921	12,471,454	18,209,282	24,037,438	18,707,754	20,762,884	22,488,020
L9 Interest	(1,883)	(4,537)	(3,137)	5,213	16,369	43,567	70,451	105,482	133,587	88,480	107,898	111,192
L10 Ending RBA Balance	(755,146)	(882,599)	(882,599)	(275,513)	2,366,909	5,006,921	12,463,352	18,209,282	24,033,101	20,762,884	22,488,020	22,104,922

Revised Adjustment to Revenue  
RBA Adjustment Recorded to Revenue  
Adjustment to Revenue

	(753,263)	(141,220)	710,223	2,637,208	2,621,623	7,412,864	5,885,387	5,778,317	5,363,869	1,976,650	1,588,126	(495,205)
	(753,474)	(141,456)	709,898	2,636,970	2,621,383	7,412,564	5,885,118	5,778,050	5,363,595	1,976,392	1,587,863	(495,469)
	211	236	237	238	240	269	269	267	273	259	263	264

Note (1)  
In connection with Decision and Order No. 31908 on Schedule A of the Decoupling Investigation, issued on February 7, 2014, the Company received approval on April 28, 2014 from the Internal Revenue Service to change its tax treatment of RBA revenue from the book accrual method of revenue balancing account ("RBA") revenue recognition to a recognition method based on when rates are adjusted and revenues are collected, effective January 1, 2014. Accordingly, starting with May 2014, interest is calculated based on a net-of-income tax RBA balance, and the following income tax factor is used in the calculation.

Income Tax Factor (1 / (1 + tax rate)) 1.638929121

Note (2)

Totals may not add exactly due to rounding.

Note (3)

The Company recorded adjustments to the RBA related to miscellaneous customer billing adjustments that were processed in November 2016. The Company recalculated the RBA based on the billing adjustment in the prior months incurred. No interest impact was calculated as the adjustment did not meet the interest recalculation threshold of \$50,000 per the Revenue Balancing Account provision tariff.

HECO-WP-B-013  
HAWAIIAN ELECTRIC COMPANY, INC.  
NOV 2016 ADJUSTMENT - MISCELLANEOUS CUSTOMER BILLING ADJUSTMENTS

REVENUE BALANCING ACCOUNT - REVENUE TRACKER

AS PREVIOUSLY STATED

	Mar-12	Apr-12	May-12	June-12	July-12	Aug-12	Sept-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13
L1 Monthly Target Revenue	41,125,462	40,152,722	43,255,064	43,980,356	45,538,102	46,940,073	45,011,146	45,528,707	42,833,187	42,830,375	42,000,731	37,645,099
L2 Recorded Adjusted Revenue	38,021,842	38,384,036	41,940,204	37,943,870	40,809,846	41,328,268	39,445,423	41,324,182	38,638,824	40,478,114	38,528,431	35,028,258
L3 Target vs. Actual Revenue	2,503,620	1,768,684	1,614,860	6,036,486	4,628,256	5,611,775	5,565,723	4,205,545	4,194,860	2,351,281	3,472,300	2,616,841
L4 Reversal of Previous Year Actual	-	-	-	(1,546,140)	(1,811,187)	(1,678,771)	(1,569,477)	(1,559,897)	(1,540,056)	(1,591,381)	(1,499,941)	(1,322,899)
L5 Net RBA Change	2,503,620	1,768,684	1,614,860	4,490,346	3,017,269	3,932,004	3,998,498	2,545,648	2,654,507	759,880	1,972,359	1,293,942
L6 Beginning RBA Balance	21,737,880	24,356,795	26,246,865	27,997,244	32,638,802	35,827,158	39,625,232	43,626,845	46,601,263	48,404,781	50,494,240	52,735,438
L7 End Balance Before Interest	24,241,845	26,122,071	27,858,051	32,483,317	35,651,778	39,758,474	43,821,726	46,370,218	49,250,210	50,238,758	52,460,408	54,028,280
L8 Balance Subject to Interest	22,868,844	25,237,728	27,050,621	30,238,311	34,143,143	37,788,495	41,818,354	45,097,392	47,922,857	49,858,816	51,474,227	53,382,359
L9 Interest	114,933	126,169	135,253	151,192	170,716	188,942	208,092	225,487	239,815	249,294	267,371	268,912
L10 Ending RBA Balance	24,353,387	26,246,260	27,993,304	32,834,509	35,822,403	39,943,440	43,824,568	46,595,703	49,409,825	50,498,050	52,717,779	54,296,192

Target vs. Actual Difference:  
Recorded Adjusted Revenues - Unadjusted

	Mar-12	Apr-12	May-12	June-12	July-12	Aug-12	Sept-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13
Recorded Adjusted Revenues - Unadjusted	38,021,842	38,384,036	41,940,204	37,943,870	40,809,846	41,328,268	39,445,423	41,324,182	38,638,824	40,478,114	38,528,431	35,028,258
Revised Revenues	38,021,597	38,383,789	41,939,957	37,943,870	40,809,287	41,327,868	39,445,173	41,323,968	38,638,327	40,478,839	38,528,100	35,027,843
Target	41,125,462	40,152,722	43,255,064	43,980,356	45,538,102	46,940,073	45,011,146	45,528,707	42,833,187	42,830,375	42,000,731	37,645,099
	2,503,865	1,768,933	1,615,107	6,036,486	4,628,256	5,612,087	5,565,973	4,205,501	4,194,860	2,351,336	3,472,031	2,617,156

AS REVISED

	Mar-12	Apr-12	May-12	June-12	July-12	Aug-12	Sept-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13
L1 Monthly Target Revenue	41,125,462	40,152,722	43,255,064	43,980,356	45,538,102	46,940,073	45,011,146	45,528,707	42,833,187	42,830,375	42,000,731	37,645,099
L2 Recorded Adjusted Revenue	38,021,597	38,383,789	41,939,957	37,943,870	40,809,287	41,327,868	39,445,173	41,323,968	38,638,327	40,478,839	38,528,100	35,027,843
L3 Target vs. Actual Revenue	2,503,865	1,768,933	1,615,107	6,036,486	4,628,256	5,612,087	5,565,973	4,205,501	4,194,860	2,351,538	3,472,631	2,617,156
L4 Reversal of Previous Year Actual	-	-	-	(1,546,140)	(1,811,187)	(1,678,771)	(1,569,477)	(1,559,897)	(1,540,056)	(1,591,381)	(1,499,941)	(1,322,899)
L5 Net RBA Change	2,503,865	1,768,933	1,615,107	4,490,346	3,017,069	3,932,316	3,998,498	2,545,604	2,654,804	760,155	1,972,890	1,294,157
L6 Beginning RBA Balance	21,737,880	24,356,795	26,246,865	27,997,244	32,638,802	35,827,158	39,625,232	43,626,845	46,601,263	48,404,781	50,494,240	52,741,991
L7 End Balance Before Interest	24,241,845	26,125,728	27,861,972	32,487,590	35,658,419	39,759,474	43,821,726	46,375,749	49,256,087	50,244,916	52,468,828	54,038,148
L8 Balance Subject to Interest	22,868,812	25,241,261	27,054,419	30,242,417	34,147,910	37,793,316	41,823,478	45,102,797	47,928,665	49,864,839	51,480,582	53,388,069
L9 Interest	114,950	126,206	135,272	151,212	170,738	188,967	208,117	225,514	239,843	249,324	267,403	268,945
L10 Ending RBA Balance	24,356,795	26,251,934	27,997,244	32,638,802	35,827,158	39,948,442	43,826,845	46,601,263	49,405,710	50,494,240	52,724,332	54,303,093

Revised Adjustment to Revenue  
RBA Adjustment Recorded to Revenue

	Mar-12	Apr-12	May-12	June-12	July-12	Aug-12	Sept-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13
Revised Adjustment to Revenue	2,503,865	1,768,933	1,615,107	6,036,486	4,628,256	5,612,087	5,565,973	4,205,501	4,194,860	2,351,538	3,472,631	2,617,156
RBA Adjustment Recorded to Revenue	2,503,620	1,768,684	1,614,860	6,036,153	4,628,158	5,611,775	5,565,723	4,205,545	4,194,583	2,351,281	3,472,300	2,616,841
	245	249	247	333	348	312	250	258	297	275	331	315



REVENUE BALANCING ACCOUNT - REVENUE TRACKER

AS PREVIOUSLY STATED

REVI  
AS.P

	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14
L1	42,000,731	40,652,559	43,763,724	46,145,218	47,779,642	49,250,622	47,289,315	47,834,122	45,901,122	45,001,122	44,128,429	39,553,044
L2	39,226,528	38,772,031	40,347,173	40,347,176	42,838,763	43,880,012	41,908,165	42,572,492	40,870,690	41,178,802	40,155,441	37,871,094
L3	2,774,203	1,880,528	3,418,305	5,854,231	4,940,879	5,570,610	5,380,150	5,261,630	4,130,432	3,822,320	3,973,988	1,681,950
L4	(1,486,048)	(1,483,978)	(1,588,384)	(4,107,427)	(4,426,857)	(4,465,183)	(4,277,405)	(4,415,078)	(4,102,603)	(4,255,258)	(3,925,516)	(3,781,214)
L5	1,288,155	388,550	1,827,821	1,748,804	514,022	1,105,447	1,103,031	848,855	27,815	(432,638)	48,472	(2,079,264)
L6	54,308,988	58,060,871	58,728,750	58,843,472	60,971,845	61,555,541	63,135,234	64,502,242	65,734,103	66,241,033	66,195,443	66,575,337
L7	55,595,464	58,447,478	59,559,914	60,580,664	61,438,310	62,661,278	64,238,268	65,406,097	65,782,019	65,808,392	66,244,238	64,436,378
L8	54,951,231	56,254,075	57,842,832	59,179,068	61,179,078	62,108,410	63,688,750	64,985,870	65,748,081	66,024,712	66,218,841	65,535,858
L9	274,736	261,270	288,214	298,385	305,885	310,542	318,434	324,928	328,740	330,124	331,069	327,879
L10	55,892,973	56,721,208	58,837,305	60,880,699	61,733,470	62,892,750	64,547,287	65,724,273	66,980,871	68,128,079	68,564,524	64,812,884

Target vs Actual Difference:  
Recorded Adjusted Revenues - Unadjusted

Recorded Adjusted Revenues	39,226,528	38,772,031	40,347,173	40,347,176	42,838,763	43,880,012	41,908,165	42,572,492	40,870,690	41,178,802	40,155,441	37,871,094
Revised Revenues	(80)	(64)	(71)	(56)	(56)	(74)	(77)	(74)	(76)	(71)	(65)	(68)
Target	(251)	(193)	(172)	(172)	(388)	(217)	(210)	(226)	(210)	(226)	(258)	(238)

AS REVISED

AS.R

	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14
L1	42,000,731	40,652,550	43,763,724	46,145,218	47,779,642	49,250,622	47,289,315	47,834,122	45,901,122	45,001,122	44,128,429	39,553,044
L2	39,226,517	38,771,773	40,347,173	40,347,176	42,838,320	43,879,721	41,908,879	42,572,189	40,870,404	41,178,504	40,155,118	37,870,789
L3	2,774,514	1,880,786	3,416,548	5,854,618	4,941,322	5,570,801	5,380,436	5,261,933	4,130,718	3,822,618	3,974,311	1,682,255
L4	(1,486,048)	(1,483,978)	(1,588,384)	(4,107,427)	(4,426,857)	(4,465,183)	(4,277,405)	(4,415,078)	(4,102,603)	(4,255,258)	(3,925,516)	(3,781,214)
L5	1,288,468	389,808	1,828,164	1,747,192	514,465	1,105,738	1,103,031	848,855	27,815	(432,640)	48,795	(2,078,959)
L6	54,308,988	58,060,871	58,728,750	58,843,472	60,971,845	61,555,541	63,135,234	64,502,242	65,734,103	66,241,033	66,195,443	66,575,337
L7	55,595,464	58,447,478	59,559,914	60,580,664	61,438,310	62,661,278	64,238,268	65,406,097	65,782,019	65,808,392	66,244,238	64,436,378
L8	54,951,231	56,254,075	57,842,832	59,179,068	61,179,078	62,108,410	63,688,750	64,985,870	65,748,081	66,024,712	66,218,841	65,535,858
L9	274,736	261,270	288,214	298,385	305,885	310,542	318,434	324,928	328,740	330,124	331,069	327,879
L10	55,892,973	56,721,208	58,837,305	60,880,699	61,733,470	62,892,750	64,547,287	65,724,273	66,980,871	68,128,079	68,575,337	64,824,057

Revised Adjustment to Revenue  
RBA Adjustment Recorded to Revenue

Revised Adjustment to Revenue	2,774,514	1,880,786	3,416,548	5,854,618	4,941,322	5,570,801	5,380,436	5,261,933	4,130,718	3,822,618	3,974,311	1,682,255
RBA Adjustment Recorded to Revenue	311	258	243	368	443	291	288	303	286	298	323	305



HECO-WP-B-013  
HAWAIIAN ELECTRIC COMPANY, INC.  
NOV 2016 ADJUSTMENT - MISCELLANEOUS CUSTOMER BILLING ADJUSTMENTS

INUE BALANCING ACCOUNT - REVENUE TRACKER

PREVIOUSLY STATED

	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16
Monthly Target Revenue	46,596,007	45,101,204	48,552,827	48,047,584	51,226,633	52,792,780	50,702,234	51,284,900	48,247,991	48,247,991	47,308,877	42,407,239
Recorded Adjusted Revenue	42,716,788	42,125,471	43,533,632	41,994,944	47,281,491	49,482,250	47,377,603	45,860,541	48,028,240	45,122,845	43,233,334	41,404,808
Target vs. Actual Revenue	3,880,119	2,975,733	5,019,195	6,052,640	3,945,142	3,310,530	3,324,631	5,424,359	2,219,742	3,125,146	4,075,543	1,002,431
Reversal of Previous Year Accrual	(5,192,949)	(5,327,188)	(5,401,784)	(3,665,156)	(5,301,934)	(5,577,653)	(5,375,270)	(5,110,063)	(5,072,650)	(4,877,639)	(4,834,357)	(4,381,515)
Net RBA Change	(1,312,830)	(2,351,455)	(382,589)	2,387,484	(1,356,792)	(2,247,123)	(2,050,639)	314,296	(2,852,908)	(1,752,493)	(558,014)	(3,378,094)
Beginning RBA Balance	58,170,978	54,910,778	52,627,239	52,304,205	54,740,597	53,448,936	51,234,324	49,251,829	48,610,143	46,800,320	45,088,941	44,879,617
End Balance Before Interest	54,854,148	52,559,314	52,244,650	54,691,689	53,383,805	51,989,813	49,183,685	49,566,125	48,757,235	45,048,027	44,528,927	41,500,533
Balance Subject to Interest	33,813,845	32,862,740	32,033,118	32,681,898	33,028,599	31,984,349	30,672,881	30,183,944	28,435,418	28,055,078	27,374,083	26,384,817
Interest	48,456	47,872	46,715	47,681	48,184	48,815	44,731	44,018	42,927	40,814	39,871	38,478
Ending RBA Balance	54,907,604	52,607,188	52,291,385	54,739,350	53,431,989	51,246,428	49,228,416	49,610,143	48,800,162	45,088,941	44,589,846	41,539,011

Target vs Actual Difference:  
Recorded Adjusted Revenues - Unadjusted  
Billing Adjustments 1  
Billing Adjustments 2  
Revised Revenues  
Target

	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16
Target vs Actual Difference:	42,716,788	42,125,471	43,533,632	41,994,944	47,281,491	49,482,250	47,377,603	45,860,541	48,028,240	45,122,845	43,233,334	41,404,808
Recorded Adjusted Revenues - Unadjusted	(68)	(77)	(75)	(69)	(63)	(96)	(91)	(95)	(88)	(74)	(73)	(81)
Billing Adjustments 1	(253)	(326)	(340)	85	(305)	(316)	(314)	(380)	(359)	(383)	(343)	(352)
Billing Adjustments 2	42,716,429	42,125,068	43,533,217	41,994,960	47,281,123	49,481,838	47,377,186	45,860,076	48,027,802	45,122,188	43,232,917	41,404,375
Revised Revenues	3,880,478	2,978,138	5,019,810	6,052,624	3,945,510	3,330,942	3,325,036	5,424,824	2,220,169	3,125,603	4,075,760	1,002,864
Target	46,596,007	45,101,204	48,552,827	48,047,584	51,226,633	52,792,780	50,702,234	51,284,900	48,247,991	48,247,991	47,308,877	42,407,239

REVISED

	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16
Monthly Target Revenue	46,596,007	45,101,204	48,552,827	48,047,584	51,226,633	52,792,780	50,702,234	51,284,900	48,247,991	48,247,991	47,308,877	42,407,239
Recorded Adjusted Revenue	42,716,429	42,125,068	43,533,217	41,994,960	47,281,123	49,481,838	47,377,186	45,860,076	48,027,802	45,122,188	43,232,917	41,404,375
Target vs. Actual Revenue	3,880,478	2,978,138	5,019,610	6,052,624	3,945,510	3,330,942	3,325,036	5,424,824	2,220,189	3,125,803	4,075,760	1,002,864
Reversal of Previous Year Accrual	(5,192,949)	(5,327,188)	(5,401,784)	(3,665,156)	(5,301,934)	(5,577,653)	(5,375,270)	(5,110,063)	(5,072,650)	(4,877,639)	(4,834,357)	(4,381,515)
Net RBA Change	(1,312,471)	(2,351,062)	(382,174)	2,387,488	(1,356,424)	(2,246,711)	(2,050,234)	314,781	(2,852,481)	(1,751,839)	(558,597)	(3,378,651)
Beginning RBA Balance	58,186,417	54,926,593	52,643,471	52,320,867	54,757,254	53,463,980	51,251,795	49,269,721	48,628,516	46,816,155	45,108,250	44,899,360
End Balance Before Interest	54,873,948	52,575,531	52,261,297	54,708,335	53,400,834	51,217,269	49,201,581	49,584,482	48,778,054	45,067,319	44,549,853	41,520,710
Balance Subject to Interest	33,923,368	32,838,524	32,043,161	32,692,070	33,038,889	31,974,887	30,683,478	30,185,016	28,446,776	28,068,724	27,386,007	26,387,010
Interest	49,472	47,887	46,730	47,678	48,178	48,830	44,747	44,034	42,943	40,831	39,838	38,486
Ending RBA Balance	54,923,418	52,623,418	52,308,027	54,756,011	53,449,013	51,263,899	49,246,308	49,628,510	48,816,997	45,108,250	44,589,591	41,559,206
Revised Adjustment to Revenue	3,880,478	2,978,138	5,019,610	6,052,624	3,945,510	3,330,942	3,325,036	5,424,824	2,220,189	3,125,803	4,075,760	1,002,864
RBA Adjustment Recorded to Revenue	3,880,110	2,975,733	5,019,105	6,052,640	3,945,142	3,330,530	3,324,631	5,424,359	2,219,742	3,125,346	4,075,343	1,002,431
Adjustment to Revenue	358	403	415	(16)	368	412	405	465	447	457	417	433

HECO-WP-B-013  
HAWAIIAN ELECTRIC COMPANY, INC.  
NOV 2016 ADJUSTMENT - MISCELLANEOUS CUSTOMER BILLING ADJUSTMENTS

REVENUE BALANCING ACCOUNT - REVENUE TRACKER

AS PREVIOUSLY STATED

	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Total Billing Adjustment
L1 Monthly Target Revenue	47,308,677	45,793,747	49,266,788	50,202,656	51,880,790	53,581,111	51,447,350	52,040,081	
L2 Recorded Adjusted Revenue	43,945,263	42,792,611	46,044,763	44,354,039	47,632,181	49,693,991	46,441,760	47,122,581	
L3 Target vs. Actual Revenue	3,363,414	3,001,136	3,252,025	5,848,617	4,248,609	3,887,120	5,005,590	4,917,480	
L4 Reversal of Previous Year Accrual	(4,548,813)	(4,608,612)	(4,846,387)	(3,792,832)	(4,131,705)	(4,323,881)	(4,085,884)	(4,075,714)	
L5 Net RBA Change	(1,185,398)	(1,607,476)	(1,596,362)	2,055,985	216,924	(437,111)	919,831	841,768	
L6 Beginning RBA Balance	41,689,970	40,654,822	39,088,352	37,559,391	39,692,282	39,945,102	39,398,886	40,364,448	
L7 End Balance Before Interest	40,484,376	39,026,728	37,460,878	36,593,816	39,867,133	39,465,481	40,295,598	41,183,200	
L8 Balance Subject to Interest	25,093,985	24,332,432	23,367,678	23,559,861	24,360,790	24,255,184	24,335,878	24,801,688	
L9 Interest	38,614	35,503	34,122	34,378	35,459	35,382	35,510	36,335	
L10 Ending RBA Balance	40,520,971	39,062,213	37,514,982	39,628,174	39,922,572	39,520,633	40,331,088	41,219,515	
Target vs Actual Difference:									
Recorded Adjusted Revenue - Unadjusted	43,945,263	42,792,611	46,044,763	44,354,039	47,632,181	49,693,991	46,441,760	47,122,581	
Billing Adjustments 1	(70)	(83)	(86)	(52)	(437)	(350)	(95)	-	(4,457)
Billing Adjustments 2	(394)	(332)	(344)	(441)	(437)	(350)	(95)	-	(17,151)
Revised Revenues	43,944,799	42,792,196	46,044,333	44,353,546	47,631,724	49,693,991	46,441,760	47,122,581	
Target	47,308,677	45,793,747	49,266,788	50,202,656	51,880,790	53,581,111	51,447,350	52,040,081	
	3,363,878	3,001,551	3,252,455	5,849,110	4,248,068	3,887,120	5,005,590	4,917,480	(21,608)

AS REVISED

	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Total RBA Adjustment
L1 Monthly Target Revenue	47,308,677	45,793,747	49,266,788	50,202,656	51,880,790	53,581,111	51,447,350	52,040,081	
L2 Recorded Adjusted Revenue	43,944,799	42,792,196	46,044,333	44,353,546	47,631,724	49,693,991	46,441,760	47,122,581	
L3 Target vs. Actual Revenue	3,363,878	3,001,551	3,252,455	5,849,110	4,248,068	3,887,120	5,005,590	4,917,480	
L4 Reversal of Previous Year Accrual	(4,548,813)	(4,608,612)	(4,846,387)	(3,792,832)	(4,131,705)	(4,323,881)	(4,085,884)	(4,075,714)	
L5 Net RBA Change	(1,184,935)	(1,607,081)	(1,595,932)	2,056,478	217,381	(436,781)	919,726	841,768	
L6 Beginning RBA Balance	41,689,970	40,654,822	39,088,352	37,559,391	39,692,282	39,945,102	39,398,886	40,364,448	
L7 End Balance Before Interest	40,503,035	39,047,821	37,562,420	36,615,868	39,868,943	39,500,342	40,316,591	41,206,215	
L8 Balance Subject to Interest	25,108,464	24,345,191	23,397,066	23,573,163	24,314,406	24,289,054	24,340,697	24,815,760	
L9 Interest	38,614	35,503	34,122	34,378	35,459	35,382	35,510	36,335	
L10 Ending RBA Balance	40,541,648	39,083,324	37,536,542	39,650,247	39,945,102	39,543,734	40,354,101	41,242,550	
Revised Adjustment to Revenue	3,363,878	3,001,551	3,252,455	5,849,110	4,248,068	3,887,120	5,005,590	4,917,480	
RBA Adjustment Recorded to Revenue	3,363,414	3,001,136	3,252,025	5,848,617	4,248,609	3,886,720	5,005,495	4,917,480	
Adjustment to Revenue	464	415	430	493	437	350	95	-	21,608

NOV 2016 ADJUSTMENT - CUSTOMER BILLING ADJUSTMENTS DUE TO J TO G RATE CHANGES

HECO-WP-B-014  
HAWAIIAN ELECTRIC COMPANY, INC.

REVENUE BALANCING ACCOUNT - REVENUE TRACKER

AS PREVIOUSLY STATED

	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13
L1 Monthly Target Revenue	42,830,375	42,000,731	37,645,099	42,000,731	40,652,559	43,783,724	46,145,218	47,779,642	49,250,822	47,289,315	47,834,122	45,001,122
L2 Recorded Adjusted Revenue	40,478,903	38,528,431	35,028,225	39,226,528	38,772,031	40,347,419	40,290,698	42,838,763	43,680,012	41,908,165	42,572,492	40,870,690
L3 Target vs. Actual Revenue	2,351,472	3,472,300	2,616,874	2,774,203	1,880,528	3,436,305	5,854,522	4,940,879	5,570,810	5,380,150	5,261,630	4,130,432
L4 Reversal of Previous Year Accrual	(1,581,361)	(1,499,941)	(1,322,999)	(1,488,048)	(1,493,978)	(1,568,384)	(4,107,427)	(4,426,857)	(4,465,163)	(4,277,405)	(4,415,078)	(4,102,803)
L5 Net RBA Change	769,880	1,972,359	1,293,875	1,286,155	386,550	1,867,921	1,747,095	514,313	1,105,738	1,103,036	846,543	27,989
L6 Beginning RBA Balance	49,478,876	50,488,050	52,735,438	54,300,097	56,053,424	56,721,208	58,835,649	60,913,594	61,546,805	63,126,184	64,552,840	65,724,351
L7 End Balance Before Interest	50,238,967	52,460,826	54,029,282	55,589,252	56,439,974	58,549,129	60,582,453	61,429,652	62,654,588	64,231,547	65,402,333	65,755,295
L8 Balance Subject to Interest	49,858,816	51,474,227	53,382,359	54,944,175	56,246,699	57,835,129	59,709,051	61,170,005	62,089,528	63,677,537	64,976,116	65,731,980
L9 Interest	249,294	257,373	266,912	274,721	281,233	288,176	298,545	305,853	310,498	318,388	324,861	328,691
L10 Ending RBA Balance	50,488,050	52,717,778	54,296,192	55,862,973	56,721,208	58,837,305	60,880,999	61,733,470	62,962,750	64,549,947	65,724,273	66,080,671

Target vs Actual Difference:

Recorded Adjusted Revenues - Unadjusted	40,478,903	38,528,431	35,028,228	39,226,528	38,772,031	40,347,419	40,290,698	42,838,763	43,680,012	41,908,165	42,572,492	40,870,690
Billing Adjustments 1	(211)	(206)	(224)	(246)	(259)	(277)	(291)	(291)	(291)	(291)	(291)	(360)
Billing Adjustments 2												
Revised Revenues	40,478,903	38,528,225	35,028,004	39,226,280	38,771,772	40,347,142	40,290,698	42,838,472	43,679,721	41,908,874	42,572,201	40,870,330
Target	42,830,375	42,000,731	37,645,099	42,000,731	40,652,559	43,783,724	46,145,218	47,779,642	49,250,822	47,289,315	47,834,122	45,001,122
	2,351,472	3,472,506	2,617,065	2,774,451	1,880,787	3,436,382	5,854,522	4,941,170	5,570,901	5,380,441	5,261,921	4,130,792

AS REVISED

	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13
L1 Monthly Target Revenue	42,830,375	42,000,731	37,645,099	42,000,731	40,652,559	43,783,724	46,145,218	47,779,642	49,250,822	47,289,315	47,834,122	45,001,122
L2 Recorded Adjusted Revenue	40,478,903	38,528,225	35,028,004	39,226,280	38,771,772	40,347,142	40,290,698	42,838,472	43,679,721	41,908,874	42,572,201	40,870,330
L3 Target vs. Actual Revenue	2,351,472	3,472,506	2,617,065	2,774,451	1,880,787	3,436,382	5,854,522	4,941,170	5,570,901	5,380,441	5,261,921	4,130,792
L4 Reversal of Previous Year Accrual	(1,581,361)	(1,499,941)	(1,322,999)	(1,488,048)	(1,493,978)	(1,568,384)	(4,107,427)	(4,426,857)	(4,465,163)	(4,277,405)	(4,415,078)	(4,102,803)
L5 Net RBA Change	769,880	1,972,359	1,293,875	1,286,155	386,550	1,867,921	1,747,095	514,313	1,105,738	1,103,036	846,543	27,989
L6 Beginning RBA Balance	49,478,876	50,488,050	52,735,438	54,300,097	56,053,422	56,722,371	58,837,095	60,913,539	61,548,850	63,128,511	64,555,490	65,727,306
L7 End Balance Before Interest	50,238,967	52,460,826	54,029,824	55,589,146	56,441,131	58,550,569	60,584,190	61,429,652	62,654,588	64,231,547	65,402,333	65,755,295
L8 Balance Subject to Interest	49,858,922	51,474,542	53,382,881	54,944,944	56,247,726	57,836,470	59,710,843	61,172,495	62,101,719	63,680,029	64,976,811	65,741,300
L9 Interest	249,295	257,373	266,914	274,725	281,239	288,182	298,553	305,862	310,509	318,400	324,895	328,707
L10 Ending RBA Balance	50,488,262	52,718,189	54,296,838	55,863,871	56,722,371	58,838,751	60,882,744	61,735,515	62,965,097	64,549,947	65,727,228	66,084,002

Revised Adjustment to Revenue	2,351,472	3,472,506	2,617,065	2,774,451	1,880,787	3,436,382	5,854,522	4,941,170	5,570,901	5,380,441	5,261,921	4,130,792
RBA Adjustment Recorded to Revenue	2,351,261	3,472,300	2,616,841	2,774,203	1,880,528	3,436,305	5,854,231	4,940,879	5,570,610	5,380,150	5,261,830	4,130,432
Adjustment to Revenue	211	206	224	248	259	277	291	291	291	291	291	360

Note [1]

In connection with Decision and Order No. 31908 on Schedule A of the Decoupling Investigation, issued on February 7, 2014, the Company received approval on April 28, 2014 from the Internal Revenue Service to change its tax treatment of RBA revenues from the book accrual method of revenue balancing account ("RBA") revenue recognition to a recognition method based on when rates are adjusted and revenues are collected, effective January 1, 2014. Accordingly, starting with May 2014, interest is calculated based on a net-of-income tax RBA balance, and the following income tax factor is used in the calculation.

$$\text{Income Tax Factor} = (1 / (1 - \text{tax rate}))$$

Note [2]

Totals may not add exactly due to rounding.

Note [3]

The Company recorded adjustments to the RBA related to customer billing adjustments due to J to G rate change that were processed in November 2016. The Company recalculated the RBA based on the billing adjustment in the prior months incurred. No interest impact was calculated as the adjustment did not meet the interest recalculation threshold of \$50,000 per the Revenue Balancing Account provision tariff.

HECO-WP-B-014  
HAWAIIAN ELECTRIC COMPANY, INC.  
NOV 2016 ADJUSTMENT - CUSTOMER BILLING ADJUSTMENTS DUE TO J TO G RATE CHANGES

REVENUE BALANCING ACCOUNT - REVENUE TRACKER

AS PREVIOUSLY STATED

	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14
Monthly Target Revenue	45,001,122	44,129,429	39,553,044	44,129,429	42,712,929	45,981,776	48,725,408	50,451,219	52,004,449	49,933,476	50,508,746	47,517,340
Recorded Adjusted Revenue	41,178,802	40,155,441	37,871,094	40,445,741	39,888,701	41,326,526	43,277,375	45,900,584	48,563,655	45,458,699	46,193,856	43,033,481
Target vs. Actual Revenue	3,822,320	3,973,988	1,681,950	3,683,688	2,824,228	4,655,250	5,448,033	4,550,635	3,440,794	4,474,777	4,314,890	4,483,859
Reversal of Previous Year Actual	(4,255,258)	(3,925,516)	(3,761,214)	(3,910,640)	(3,873,501)	(4,160,313)	(5,518,592)	(5,956,735)	(6,117,873)	(6,024,188)	(6,133,236)	(6,514,770)
Net RBA Change	(432,938)	48,472	(2,079,264)	(226,952)	(1,048,273)	494,737	(70,559)	(1,406,100)	(677,079)	(1,547,411)	(1,818,346)	(1,030,911)
Beginning RBA Balance	66,230,945	66,185,008	66,564,524	64,830,562	64,700,876	63,660,874	64,212,547	64,196,163	62,860,842	62,267,427	60,846,256	59,205,801
End Balance Before Interest	65,798,007	66,233,478	64,485,260	64,603,610	63,651,603	64,155,811	64,141,988	62,793,063	62,183,763	60,720,016	59,026,912	58,174,910
Balance Subject to Interest	66,014,476	66,202,242	65,524,892	64,712,086	64,170,239	39,041,545	39,205,693	38,768,775	38,194,875	37,968,314	36,816,787	35,853,938
Interest	330,072	331,046	327,624	94,379	93,590	56,936	57,175	56,568	55,701	54,785	53,399	52,287
Ending RBA Balance	66,126,079	66,564,524	64,812,884	64,697,989	63,745,193	64,212,547	64,196,163	62,848,631	62,239,464	60,774,801	59,083,311	58,227,197

Target vs Actual Differences:

Recorded Adjusted Revenue - Unadjusted	41,178,802	40,155,441	37,871,094	40,445,741	39,888,701	41,326,526	43,277,375	45,900,584	48,563,655	45,458,699	46,193,856	43,033,481
Billing Adjustments 1	(240)	(245)	(232)	(235)	(281)	(285)	(281)	(285)	(285)	(285)	(285)	(277)
Billing Adjustments 2	-	-	-	-	-	-	-	-	-	-	-	-
Revised Revenues	41,178,562	40,155,196	37,870,862	40,445,434	39,888,131	41,325,950	43,276,801	45,900,299	48,563,370	45,458,414	46,193,571	43,033,148
Target	45,001,122	44,129,429	39,553,044	44,129,429	42,712,929	45,981,776	48,725,408	50,451,219	52,004,449	49,933,476	50,508,746	47,517,340
	3,822,560	3,974,233	1,682,182	3,683,995	2,824,798	4,655,826	5,448,607	4,550,920	3,441,079	4,477,062	4,315,175	4,484,192

AS REVISED

	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14
Monthly Target Revenue	45,001,122	44,129,429	39,553,044	44,129,429	42,712,929	45,981,776	48,725,408	50,451,219	52,004,449	49,933,476	50,508,746	47,517,340
Recorded Adjusted Revenue	41,178,562	40,155,196	37,870,862	40,445,434	39,888,131	41,325,950	43,276,801	45,900,299	48,563,370	45,458,414	46,193,571	43,033,148
Target vs. Actual Revenue	3,822,560	3,974,233	1,682,182	3,683,995	2,824,798	4,655,826	5,448,607	4,550,920	3,441,079	4,477,062	4,315,175	4,484,192
Reversal of Previous Year Actual	(4,255,258)	(3,925,516)	(3,761,214)	(3,910,640)	(3,873,501)	(4,160,313)	(5,518,592)	(5,956,735)	(6,117,873)	(6,024,188)	(6,133,236)	(6,514,770)
Net RBA Change	(432,698)	48,717	(2,079,032)	(226,645)	(1,048,703)	495,313	(69,995)	(1,405,815)	(676,794)	(1,547,126)	(1,818,061)	(1,030,578)
Beginning RBA Balance	66,234,276	66,186,595	66,568,377	64,834,667	64,705,294	63,665,869	64,218,122	64,205,317	62,867,267	62,274,164	60,855,288	59,213,122
End Balance Before Interest	65,801,576	66,237,312	64,486,345	64,608,022	63,656,591	64,161,182	64,146,137	62,789,502	62,180,494	60,727,038	59,037,226	58,182,543
Balance Subject to Interest	66,017,927	66,212,954	65,528,861	64,721,345	64,160,943	39,044,773	39,209,474	38,769,622	38,198,899	37,970,717	36,821,168	35,858,506
Interest	330,090	331,065	327,844	94,385	93,597	56,940	57,180	56,574	55,707	54,791	53,406	52,294
Ending RBA Balance	66,131,668	66,568,377	64,816,989	64,702,407	63,750,188	64,218,122	64,205,317	62,850,076	62,246,201	60,761,829	59,069,632	58,234,837

Revised Adjustment to Revenue  
RBA Adjustment Recorded to Revenue  
Adjustment to Revenue

	240	243	232	307	570	578	574	265	265	265	265	313
--	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

**AS PREVIOUSLY STATED**

**Target vs Actual Difference:**  
**Recorded Adjusted Revenues - Unadjusted**

UNREVIEWED

Revised Adjustment to Revenue  
RBA Adjustment Recorded to Revenue  
Adjustment to Revenue

	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990	1989	1988	1987	1986	1985	1984	1983	1982	1981	1980	1979	1978	1977	1976	1975	1974	1973	1972	1971	1970	1969	1968	1967	1966	1965	1964	1963	1962	1961	1960	1959	1958	1957	1956	1955	1954	1953	1952	1951	1950	1949	1948	1947	1946	1945	1944	1943	1942	1941	1940	1939	1938	1937	1936	1935	1934	1933	1932	1931	1930	1929	1928	1927	1926	1925	1924	1923	1922	1921	1920	1919	1918	1917	1916	1915	1914	1913	1912	1911	1910	1909	1908	1907	1906	1905	1904	1903	1902	1901	1900	1899	1898	1897	1896	1895	1894	1893	1892	1891	1890	1889	1888	1887	1886	1885	1884	1883	1882	1881	1880	1879	1878	1877	1876	1875	1874	1873	1872	1871	1870	1869	1868	1867	1866	1865	1864	1863	1862	1861	1860	1859	1858	1857	1856	1855	1854	1853	1852	1851	1850	1849	1848	1847	1846	1845	1844	1843	1842	1841	1840	1839	1838	1837	1836	1835	1834	1833	1832	1831	1830	1829	1828	1827	1826	1825	1824	1823	1822	1821	1820	1819	1818	1817	1816	1815	1814	1813	1812	1811	1810	1809	1808	1807	1806	1805	1804	1803	1802	1801	1800	1799	1798	1797	1796	1795	1794	1793	1792	1791	1790	1789	1788	1787	1786	1785	1784	1783	1782	1781	1780	1779	1778	1777	1776	1775	1774	1773	1772	1771	1770	1769	1768	1767	1766	1765	1764	1763	1762	1761	1760	1759	1758	1757	1756	1755	1754	1753	1752	1751	1750	1749	1748	1747	1746	1745	1744	1743	1742	1741	1740	1739	1738	1737	1736	1735	1734	1733	1732	1731	1730	1729	1728	1727	1726	1725	1724	1723	1722	1721	1720	1719	1718	1717	1716	1715	1714	1713	1712	1711	1710	1709	1708	1707	1706	1705	1704	1703	1702	1701	1700	1699	1698	1697	1696	1695	1694	1693	1692	1691	1690	1689	1688	1687	1686	1685	1684	1683	1682	1681	1680	1679	1678	1677	1676	1675	1674	1673	1672	1671	1670	1669	1668	1667	1666	1665	1664	1663	1662	1661	1660	1659	1658	1657	1656	1655	1654	1653	1652	1651	1650	1649	1648	1647	1646	1645	1644	1643	1642	1641	1640	1639	1638	1637	1636	1635	1634	1633	1632	1631	1630	1629	1628	1627	1626	1625	1624	1623	1622	1621	1620	1619	1618	1617	1616	1615	1614	1613	1612	1611	1610	1609	1608	1607	1606	1605	1604	1603	1602	1601	1600	1599	1598	1597	1596	1595	1594	1593	1592	1591	1590	1589	1588	1587	1586	1585	1584	1583	1582	1581	1580	1579	1578	1577	1576	1575	1574	1573	1572	1571	1570	1569	1568	1567	1566	1565	1564	1563	1562	1561	1560	1559	1558	1557	1556	1555	1554	1553	1552	1551	1550	1549	1548	1547	1546	1545	1544	1543	1542	1541	1540	1539	1538	1537	1536	1535	1534	1533	1532	1531	1530	1529	1528	1527	1526	1525	1524	1523	1522	1521	1520	1519	1518	1517	1516	1515	1514	1513	1512	1511	1510	1509	1508	1507	1506	1505	1504	1503	1502	1501	1500	1499	1498	1497	1496	1495	1494	1493	1492	1491	1490	1489	1488	1487	1486	1485	1484	1483	1482	1481	1480	1479	1478	1477	1476	1475	1474	1473	1472	1471	1470	1469	1468	1467	1466	1465	1464	1463	1462	1461	1460	1459	1458	1457	1456	1455	1454	1453	1452	1451	1450	1449	1448	1447	1446	1445	1444	1443	1442	1441	1440	1439	1438	1437	1436	1435	1434	1433	1432	1431	1430	1429	1428	1427	1426	1425	1424	1423	1422	1421	1420	1419	1418	1417	1416	1415	1414	1413	1412	1411	1410	1409	1408	1407	1406	1405	1404	1403	1402	1401	1400	1399	1398	1397	1396	1395	1394	1393	1392	1391	1390	1389	1388	1387	1386	1385	1384	1383	1382	1381	1380	1379	1378	1377	1376	1375	1374	1373	1372	1371	1370	1369	1368	1367	1366	1365	1364	1363	1362	1361	1360	1359	1358	1357	1356	1355	1354	1353	1352	1351	1350	1349	1348	1347	1346	1345	1344	1343	1342	1341	1340	1339	1338	1337	1336	1335	1334	1333	1332	1331	1330	1329	1328	1327	1326	1325	1324	1323	1322	1321	1320	1319	1318	1317	1316	1315	1314	1313	1312	1311	1310	1309	1308	1307	1306	1305	1304	1303	1302	1301	1300	1299	1298	1297	1296	1295	1294	1293	1292	1291	1290	1289	1288	1287	1286	1285	1284	1283	1282	1281	1280	1279	1278	1277	1276	1275	1274	1273	1272	1271	1270	1269	1268	1267	1266	1265	1264	1263	1262	1261	1260	1259	1258	1257	1256	1255	1254	1253	1252	1251	1250	1249	1248	1247	1246	1245	1244	1243	1242	1241	1240	1239	1238	1237	1236	1235	1234	1233	1232	1231	1230	1229	1228	1227	1226	1225	1224	1223	1222	1221	1220	1219	1218	1217	1216	1215	1214	1213	1212	1211	1210	1209	1208	1207	1206	1205	1204	1203	1202	1201	1200	1199	1198	1197	1196	1195	1194	1193	1192	1191	1190	1189	1188	1187	1186	1185	1184	1183	1182	1181	1180	1179	1178	1177	1176	1175	1174	1173	1172	1171	1170	1169	1168	1167	1166	1165	1164	1163	1162	1161	1160	1159	1158	1157	1156	1155	1154	1153	1152	1151	1150	1149	1148	1147	1146	1145	1144	1143	1142	1141	1140	1139	1138	1137	1136	1135	1134	1133	1132	1131	1130	1129	1128	1127	1126	1125	1124	1123	1122	1121	1120	1119	1118	1117	1116	1115	1114	1113	1112	1111	1110	1109	1108	1107	1106	1105	1104	1103	1102	1101	1100	1099	1098	1097	1096	1095	1094	1093	1092	1091	1090	1089	1088	1087	1086	1085	1084	1083	1082	1081	1080	1079	1078	1077	1076	1075	1074	1073	1072	1071	1070	1069	1068	1067	1066	1065	1064	1063	1062	1061	1060	1059	1058	1057	1056	1055	1054	1053	1052	1051	1050	1049	1048	1047	1046	1045	1044	1043	1042	1041	1040	1039	1038	1037	1036	1035	1034	1033	1032	1031	1030	1029	1028	1027	1026	1025	1024	1023	1022	1021	1020	1019	1018	1017	1016	1015	1014	1013	1012	1011	1010	1009	1008	1007	1006	1005	1004	1003	1002	1001	1000	999	998	997	996	995	994	993	992	991	990	989	988	987	986	985	984	983	982	981	980	979	978	977	976	975	974	973	972	971	970	969	968	967	966	965	964	963	962	961	960	959	958	957	956	955	954	953	952	951	950	949	948	947	946	945	944	943	942	941	940	939	938	937	936	935	934	933	932	931	930	929	928	927	926	925	924	923	922	921	920	919	918	917	916	915	914	913	912	911	910	909	908	907	906	905	904	903	902	901	900	899	898	897	896	895	894	893	892	891	890	889	888	887	886	885	884	883	882	881	880	879	878	877	876	875	874	873	872	871	870	869	868	867	866	865	864	863	862	861	860	859	858	857	856	855	854	853	852	851	850	849	848	847	846	845	844	843	842	841	840	839	838	837	836	835	834	833	832	831	830	829	828	827	826	825	824	823	822	821	820	819	818	817	816	815	814	813	812	811	810	809	808	807	806	805	804	803	802	801	800	799	798	797	796	795	794	793	792	791	790	789	788	787	786	785	784	783	782	781	780	779	778	777	776	775	774	773	772	771	770	769	768	767	766	765	764	763	762	761	760	759	758	757	756	755	754	753	752	751	750	749	748	747	746	745	744	743	742	741	740	739	738	737	736	735	734	733	732	731	730	729	728	727	726	725	724	723	722	721	720	719	718	717	716	715	714	713	712	711	710	709	708	707	706	705	704	703	702	701	700	699	698	697	696	695	694	693	692	691	690	689	688	687	686	685	684	683	682	681	680	679	678	677	676	675	674	673	672	671	670	669	668	667	666	665	664	663	662	661	660	659	658	657	656	655	654	653	652	651	650	649	648	647	646	645	644	643	642	641	640	639	638	637	636	635	634	633	632	631	630	629	628	627	626	625	624	623	622	621	620	619	618	617	616	615	614	613	612	611	610	609	608	607	606	605	604	603	602	601	600	599	598	597	596	595	594	593	592	591	590	589	588	587	586
--	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

**AS PREVIOUSLY STATED**

[illegible]

## 17

	Dec-14	Jan-15	Feb-15	March-15	April-15	May-15	June-15	July-15	Aug-15	Sept-15	Oct-15
Monthly Target Revenue	47,306,677	42,407,239	47,308,677	45,793,747	49,296,768	50,202,656	51,980,790	51,980,790	53,581,111	51,447,350	52,040,061
Recorded Adjusted Revenue	45,122,359	43,233,048	41,404,522	43,944,975	46,044,477	44,353,789	47,631,862	49,694,062	46,441,570	47,122,305	47,122,305
Target vs. Actual Revenue	3,125,632	4,075,620	1,002,717	3,363,702	3,001,421	3,252,311	3,848,887	3,848,887	5,005,780	4,817,756	4,817,756
Reversal of Previous Year Accrual	(4,877,639)	(4,384,357)	(4,384,515)	(4,548,813)	(4,648,387)	(3,782,832)	(4,131,705)	(4,323,884)	(4,003,864)	(4,075,714)	(4,075,714)
Net RBA Change	(1,752,007)	(559,728)	(3,378,798)	(1,185,111)	(1,607,191)	(2,096,255)	21,203	(436,832)	919,916	842,042	842,042
Beginning RBA Balance	48,811,456	45,100,373	44,891,345	41,681,799	40,646,528	39,089,861	37,550,748	39,663,408	39,369,746	39,369,746	40,355,913
End Balance Before Interest	45,059,449	44,541,645	41,512,547	40,496,649	39,033,337	37,493,785	39,607,003	39,409,230	40,309,663	41,197,355	41,197,355
Balance Subject to Interest	28,061,968	27,381,155	28,392,069	25,101,419	24,340,047	23,392,475	23,567,835	24,800,939	24,283,510	24,344,164	24,910,784
Interest	40,924	39,931	38,488	36,606	34,114	34,370	35,451	35,384	35,502	36,328	36,328
Ending RBA Balance	45,100,373	44,581,578	41,551,035	40,533,295	39,074,833	39,641,373	39,938,062	39,534,614	40,345,165	41,233,683	41,233,683
Revised Adjustment to Revenue	3,125,632	4,075,620	1,002,717	3,363,702	3,001,421	3,252,311	5,848,887	4,348,908	3,847,049	5,005,780	4,917,756
RBA Adjustment Recorded to Revenue	3,125,346	4,075,343	1,002,431	3,363,414	3,001,136	3,252,025	5,848,611	4,348,629	3,846,770	5,005,495	4,917,480
Adjustment to Revenue	286	286	286	288	285	286	270	279	279	285	276



HECO-WP-B-015  
HAWAIIAN ELECTRIC COMPANY, INC.  
DEC 2016 ADJUSTMENT - MISCELLANEOUS J RATE BILLING ADJUSTMENT

REVENUE BALANCING ACCOUNT - REVENUE TRACKER

AS PREVIOUSLY STATED

		Nov-16
L1	Monthly Target Revenue	48,957,962
L2	Recorded Adjusted Revenue	43,941,301
L3 L1 - L2	Target vs. Actual Revenue	5,016,661
L4	Reversal of Previous Year Accrual	(3,736,832)
L5 L4 + L3	Net RBA Change	1,279,829
L6	Beginning RBA Balance	41,290,214
L7 L6 + L5	End Balance Before Interest	42,570,043
L8 (L6 + L7) + 2 + [1]	Balance Subject to Interest	25,615,115
L9 L8 x 1.75% + 12	Interest	37,355
L10 L7 + L9	Ending RBA Balance	42,607,398

Target vs Actual Difference:		
Recorded Adjusted Revenues - Unadjusted	43,941,301	<u>Total Billing</u>
Billing Adjustments 1	4,878	<u>Adjustment</u>
Revised Revenues	43,946,179	4,878
Target	48,957,962	
	5,011,783	

AS REVISED

		Nov-16
L1	Monthly Target Revenue	48,957,962
L2	Recorded Adjusted Revenue	43,946,179
L3 L1 - L2	Target vs. Actual Revenue	5,011,783
L4	Reversal of Previous Year Accrual	(3,736,832)
L5 L4 + L3	Net RBA Change	1,274,951
L6	Beginning RBA Balance	41,290,214
L7 L6 + L5	End Balance Before Interest	42,565,165
L8 (L6 + L7) + 2 + [1]	Balance Subject to Interest	25,613,625
L9 L8 x 1.75% + 12	Interest	37,353
L10 L7 + L9	Ending RBA Balance	42,602,518

Revised Adjustment to Revenue	5,011,783	<u>Total RBA</u>
RBA Adjustment Recorded to Revenue	5,016,661	<u>Adjustment</u>
Adjustment to Revenue	(4,878)	(4,878)

Note [1]

In connection with Decision and Order No. 31908 on Schedule A of the Decoupling Investigation, issued on February 7, 2014, the Company received approval on April 28, 2014 from the Internal Revenue Service to change its tax treatment of RBA revenues from the book accrual method of revenue balancing account ("RBA") revenue recognition to a recognition method based on when rates are adjusted and revenues are collected, effective January 1, 2014. Accordingly, starting with May 2014, interest is calculated based on a net-of-income tax RBA balance, and the following income tax factor is used in the calculation.

Income Tax Factor ( 1 / 1-tax rate)

Note [2]

Totals may not add exactly due to rounding.

Note [3]

The Company recorded an adjustment to the RBA related to miscellaneous J rate billing adjustment processed in December 2016. The Company recalculated the RBA based on the billing adjustment in the prior months incurred. No interest impact was calculated as the adjustment did not meet the interest recalculation threshold of \$50,000 per the Revenue Balancing Account provision tariff.

HECO-WP-B-016  
HAWAIIAN ELECTRIC COMPANY, INC.  
JAN 2017 ADJUSTMENT - MISCELLANEOUS R RATE BILLING ADJUSTMENT

REVENUE BALANCING ACCOUNT - REVENUE TRACKER

AS PREVIOUSLY STATED

	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12
L1 Monthly Target Revenue	36,452,740	35,681,973	37,812,917	39,048,559	41,350,321	45,888,046	44,070,248	44,577,970	41,937,817	41,937,817	41,125,462	36,860,569
L2 Recorded Adjusted Revenue	37,200,205	35,823,420	37,102,918	38,408,578	41,350,321	39,485,471	38,385,130	38,799,909	36,574,216	36,961,419	39,527,582	37,356,062
L3 Target vs. Actual Revenue	(753,465)	(141,447)	709,999	2,036,063	2,621,404	7,412,575	5,685,130	5,778,061	5,360,601	1,978,398	1,597,870	(495,495)
L4 Reversal of Previous Year Actual												
L5 Net RBA Change	(753,465)	(141,447)	709,999	2,036,063	2,621,404	7,412,575	5,685,130	5,778,061	5,360,601	1,978,398	1,597,870	(495,495)
L6 Beginning RBA Balance	(837,045)	(837,045)	(837,045)	(837,045)	(837,045)	(837,045)	(837,045)	(837,045)	(837,045)	(837,045)	(837,045)	(837,045)
L7 End Balance Before Interest	(753,474)	(695,598)	(627,046)	(553,982)	(478,681)	(404,106)	(328,976)	(254,915)	(181,314)	(108,916)	(36,046)	21,960,584
L8 Balance Subject to Interest	(753,474)	(695,598)	(627,046)	(553,982)	(478,681)	(404,106)	(328,976)	(254,915)	(181,314)	(108,916)	(36,046)	21,960,584
L9 Interest	(1,884)	(4,539)	(3,140)	5,211	18,364	43,561	76,443	105,463	133,587	161,609	189,637	223,319
L10 Ending RBA Balance	(755,358)	(699,448)	(629,986)	(548,771)	(460,317)	(360,545)	(252,533)	(149,452)	(77,727)	(47,307)	(16,409)	22,101,776

Target vs Actual Difference:  
Billing Adjustments 1  
Revised Revenues  
Target

AS REVISED

	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Oct-11	Nov-11	Dec-11	Jan-12	Feb-12
L1 Monthly Target Revenue	36,452,740	35,681,973	37,812,917	39,048,559	41,350,321	45,888,046	44,070,248	44,577,970	41,937,817	41,937,817	41,125,462	36,860,569
L2 Recorded Adjusted Revenue	37,200,205	35,823,420	37,102,918	38,408,578	41,350,321	39,485,471	38,385,130	38,799,909	36,574,216	36,961,419	39,527,582	37,356,062
L3 Target vs. Actual Revenue	(753,465)	(141,447)	710,001	2,036,063	2,621,404	7,412,575	5,685,130	5,778,061	5,360,601	1,978,398	1,597,870	(495,495)
L4 Reversal of Previous Year Actual												
L5 Net RBA Change	(753,465)	(141,447)	710,001	2,036,063	2,621,404	7,412,575	5,685,130	5,778,061	5,360,601	1,978,398	1,597,870	(495,495)
L6 Beginning RBA Balance	(837,045)	(837,045)	(837,045)	(837,045)	(837,045)	(837,045)	(837,045)	(837,045)	(837,045)	(837,045)	(837,045)	(837,045)
L7 End Balance Before Interest	(753,465)	(695,498)	(626,998)	(553,934)	(478,580)	(403,005)	(327,880)	(253,809)	(180,208)	(107,609)	(35,739)	21,960,584
L8 Balance Subject to Interest	(753,465)	(695,498)	(626,998)	(553,934)	(478,580)	(403,005)	(327,880)	(253,809)	(180,208)	(107,609)	(35,739)	21,960,584
L9 Interest	(1,884)	(4,539)	(3,140)	5,211	18,364	43,561	76,443	105,463	133,587	161,609	189,637	223,319
L10 Ending RBA Balance	(755,349)	(699,438)	(629,979)	(548,725)	(460,216)	(360,444)	(252,437)	(149,346)	(77,621)	(47,230)	(16,102)	22,101,767

Note [1]  
In connection with Decision and Order No. 31908 on Schedule A of the Decoupling Investigation, issued on February 7, 2014, the Company received approval on April 23, 2014 from the Internal Revenue Service to change its tax treatment of RBA revenues from the book accrual method of revenue balancing account ("RBA") revenue recognition to a recognition method based on when rates are adjusted and revenues are collected, effective January 1, 2014. Accordingly, starting with May 2014, interest is calculated based on a net-of-income tax RBA balance, and the following income tax factor is used in the calculation

Income Tax Factor (1 / 1-tax rate)

Note [2]  
Totals may not add exactly due to rounding.

Note [3]  
The Company recorded an adjustment to the RBA related to miscellaneous R rate billing adjustment processed in January 2017. The Company recalculated the RBA based on the billing adjustment in the prior months incurred. No interest impact was calculated as the adjustment did not meet the interest recalculation threshold of \$50,000 per the Revenue Balancing Account provision tariff.

REVENUE BALANCING ACCOUNT - REVENUE TRACKER

AS PREVIOUSLY STATED

	Mar-12	Apr-12	May-12	June-12	July-12	Aug-12	Sept-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13
L1 Monthly Target Revenue	41,125,492	40,152,722	43,255,064	43,880,358	45,538,102	46,940,073	45,011,146	45,529,707	42,833,187	42,830,375	42,000,731	37,845,099
L2 Recorded Adjusted Revenue	38,621,837	38,394,033	41,640,199	37,844,190	40,069,639	41,323,287	39,445,408	41,324,147	38,638,613	40,478,114	38,528,431	35,028,258
L3 Target vs Actual Revenue	2,503,655	1,758,689	1,614,865	6,036,168	4,828,456	5,616,786	5,565,738	4,205,560	4,194,574	2,351,261	3,472,300	2,816,841
L4 Reversal of Previous Year Actual					(1,611,187)	(1,611,187)	(1,569,477)	(1,636,897)	(1,540,056)	(1,591,381)	(1,469,941)	(1,322,889)
L5 Net RBA Change	2,503,655	1,758,689	1,614,865	4,425,000	3,017,270	3,032,015	3,066,261	2,568,653	2,654,518	759,880	1,972,359	1,293,942
L6 Beginning RBA Balance	21,734,834	24,353,387	26,243,191	27,893,324	28,804,584	30,027,015	30,628,405	33,624,739	46,595,910	49,478,095	50,468,280	52,735,081
L7 End Balance Before Interest	24,238,590	26,122,071	27,858,051	29,323,317	30,651,778	30,754,671	32,180,666	43,370,422	49,238,428	50,238,865	52,468,650	54,029,280
L8 Balance Subject to Interest	22,886,844	25,232,729	27,060,871	28,238,311	34,143,143	37,768,495	41,818,354	45,097,951	47,923,168	49,858,040	51,474,463	53,362,691
L9 Interest	114,813	126,189	135,253	151,192	170,716	185,942	208,092	225,487	239,815	249,284	257,371	266,812
L10 Ending RBA Balance	24,353,387	26,243,260	27,993,304	29,634,509	35,822,493	39,943,440	43,824,598	48,586,703	49,469,825	50,468,050	52,717,779	54,296,102

Target vs Actual Difference:  
Recorded Adjusted Revenues - Unadjusted  
Revised Revenues  
Target

	Mar-12	Apr-12	May-12	June-12	July-12	Aug-12	Sept-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13
	38,621,837	38,394,033	41,640,199	37,844,190	40,069,639	41,323,287	39,445,408	41,324,147	38,638,613	40,478,114	38,528,431	35,028,258
	41,125,492	40,152,722	43,255,064	43,880,358	45,538,102	46,940,073	45,011,146	45,529,707	42,833,187	42,830,375	42,000,731	37,845,099
	2,503,655	1,758,689	1,614,865	6,036,168	4,828,456	5,616,786	5,565,738	4,205,560	4,194,574	2,351,261	3,472,300	2,816,841

AS REVISED

	Mar-12	Apr-12	May-12	June-12	July-12	Aug-12	Sept-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13
L1 Monthly Target Revenue	41,125,492	40,152,722	43,255,064	43,880,358	45,538,102	46,940,073	45,011,146	45,529,707	42,833,187	42,830,375	42,000,731	37,845,099
L2 Recorded Adjusted Revenue	38,621,837	38,394,033	41,640,199	37,844,190	40,069,639	41,323,287	39,445,408	41,324,147	38,638,613	40,478,114	38,528,431	35,028,258
L3 Target vs Actual Revenue	2,503,655	1,758,689	1,614,865	6,036,168	4,828,456	5,616,786	5,565,738	4,205,560	4,194,574	2,351,261	3,472,300	2,816,841
L4 Reversal of Previous Year Actual					(1,611,187)	(1,611,187)	(1,569,477)	(1,636,897)	(1,540,056)	(1,591,381)	(1,469,941)	(1,322,889)
L5 Net RBA Change	2,503,655	1,758,689	1,614,865	4,425,000	3,017,270	3,032,015	3,066,261	2,568,653	2,654,518	759,880	1,972,359	1,293,942
L6 Beginning RBA Balance	21,734,834	24,353,387	26,243,191	27,893,324	28,804,584	30,027,015	30,628,405	33,624,739	46,595,910	49,478,095	50,468,280	52,735,081
L7 End Balance Before Interest	24,238,590	26,122,071	27,858,051	29,323,317	30,651,778	30,754,671	32,180,666	43,370,422	49,238,428	50,238,865	52,468,650	54,029,280
L8 Balance Subject to Interest	22,886,844	25,232,729	27,060,871	28,238,311	34,143,143	37,768,495	41,818,354	45,097,951	47,923,168	49,858,040	51,474,463	53,362,691
L9 Interest	114,813	126,189	135,253	151,192	170,716	185,942	208,092	225,487	239,815	249,284	257,371	266,812
L10 Ending RBA Balance	24,353,387	26,243,260	27,993,304	29,634,509	35,822,493	39,943,440	43,824,598	48,586,703	49,469,825	50,468,050	52,717,779	54,296,102

Revised Adjustments to Revenue  
RBA Adjustment Recorded to Revenue  
Adjustment to Revenue

	Mar-12	Apr-12	May-12	June-12	July-12	Aug-12	Sept-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13
	2,503,655	1,758,689	1,614,865	6,036,168	4,828,456	5,616,786	5,565,738	4,205,560	4,194,574	2,351,261	3,472,300	2,816,841
	2,503,655	1,758,689	1,614,865	6,036,168	4,828,456	5,616,786	5,565,738	4,205,560	4,194,574	2,351,261	3,472,300	2,816,841

REVENUE BALANCING ACCOUNT - REVENUE TRACKER

A3 PREVIOUSLY STATED

	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14
L1 Monthly Target Revenue	42,000,731	40,652,559	43,763,724	46,145,218	47,779,842	48,250,822	47,289,315	47,834,122	45,001,122	45,001,122	44,128,429	39,553,044
L2 Recorded Adjusted Revenue	39,226,528	38,772,031	40,347,419	40,260,987	42,838,763	43,680,012	41,908,165	42,572,492	40,870,890	41,178,802	40,155,441	37,871,083
L3 Target vs Actual Revenue	2,774,203	1,880,528	3,416,305	5,884,231	4,940,879	5,570,810	5,381,150	5,261,630	4,130,432	3,822,330	3,973,988	1,681,950
L4 Rental of Previous Year Annual	(1,468,048)	(1,463,078)	(1,598,384)	(1,407,427)	(4,326,857)	(4,465,183)	(4,277,495)	(4,415,078)	(4,102,803)	(4,255,258)	(3,761,214)	(3,075,516)
L5 Net RBA Change	1,306,155	396,550	1,827,921	1,748,804	514,022	1,105,447	1,102,745	846,552	27,629	(432,938)	(48,472)	(2,079,264)
L6 Beginning RBA Balance	54,300,997	56,053,424	56,721,208	58,835,458	60,813,594	61,548,805	63,126,164	64,552,340	65,724,351	66,230,945	66,185,009	66,594,324
L7 End Balance Before Interest	55,589,252	56,439,074	56,549,129	58,562,613	61,427,618	62,852,252	64,220,090	65,399,192	65,751,680	65,768,007	66,233,478	64,485,360
L8 Balance Subject to Interest	54,844,175	56,248,695	57,635,169	58,798,051	61,170,605	62,099,528	63,877,537	64,976,116	65,238,155	65,014,478	66,208,242	65,524,892
L9 Interest	274,721	281,233	288,178	298,545	305,853	310,468	318,368	324,881	328,691	330,072	331,046	327,824
L10 Ending RBA Balance	55,862,873	56,771,206	58,837,305	60,880,998	61,733,470	62,862,750	64,547,297	65,774,273	66,080,671	66,128,079	66,594,524	64,812,884

Target vs Actual Difference:  
Recorded Adjusted Revenues - Unadjusted  
Revised Revenue  
Target

A3 REVISED

	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14
L1 Monthly Target Revenue	42,000,731	40,652,559	43,763,724	46,145,218	47,779,842	48,250,822	47,289,315	47,834,122	45,001,122	45,001,122	44,128,429	39,553,044
L2 Recorded Adjusted Revenue	39,226,519	38,772,020	40,347,407	40,260,987	42,838,734	43,678,977	41,908,128	42,572,467	40,870,872	41,178,788	40,155,430	37,871,083
L3 Target vs Actual Revenue	2,774,212	1,880,539	3,416,317	5,884,231	4,940,908	5,571,845	5,381,187	5,261,655	4,130,450	3,822,334	3,973,999	1,681,961
L4 Rental of Previous Year Annual	(1,468,048)	(1,463,078)	(1,598,384)	(1,407,427)	(4,326,857)	(4,465,183)	(4,277,495)	(4,415,078)	(4,102,803)	(4,255,258)	(3,761,214)	(3,075,516)
L5 Net RBA Change	1,306,164	396,461	1,827,933	1,748,834	514,051	1,105,462	1,102,752	846,563	27,647	(432,924)	(48,483)	(2,079,253)
L6 Beginning RBA Balance	54,300,351	56,053,688	56,721,465	58,835,719	60,813,916	61,549,168	63,126,353	64,553,369	65,724,386	66,231,020	66,185,488	66,595,000
L7 End Balance Before Interest	55,588,515	56,440,549	56,549,604	58,563,139	61,428,143	62,852,777	64,220,335	65,399,445	65,752,453	65,769,198	66,233,981	64,485,777
L8 Balance Subject to Interest	54,844,433	56,249,898	57,635,432	58,798,319	61,170,841	62,099,699	63,877,843	64,976,424	65,238,629	65,014,658	66,209,739	65,525,403
L9 Interest	274,722	281,233	288,177	298,547	305,855	310,469	318,369	324,893	328,693	330,075	331,049	327,827
L10 Ending RBA Balance	55,863,237	56,771,465	58,837,595	60,881,321	61,733,623	62,863,138	64,547,725	65,774,726	66,081,146	66,128,571	66,595,030	64,813,004

Revised Adjustment to Revenue  
RBA Adjustment Recorded to Revenue  
Adjustment to Revenue

HECO-WP-B-018  
HAWAIIAN ELECTRIC COMPANY, INC.  
JAN 2017 ADJUSTMENT - MISCELLANEOUS R RATE BILLING ADJUSTMENT

REVENUE BALANCING ACCOUNT - REVENUE TRACKER

AS PREVIOUSLY STATED

	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15
L1 Monthly Target Revenue	44,120,429	42,712,929	45,981,776	48,725,408	50,451,219	52,004,449	49,933,476	50,508,746	47,517,340	47,517,340	46,590,907	41,784,635
L2 Recorded Adjusted Revenue	40,445,730	39,888,091	41,328,526	43,277,375	45,900,594	46,583,655	45,458,699	46,193,656	43,033,461	42,808,991	41,131,344	38,988,462
L3 Target vs. Actual Revenue	3,683,699	2,824,228	4,653,250	5,448,033	4,550,625	5,420,794	4,474,777	4,314,890	4,483,879	4,708,379	5,459,563	2,796,173
L4 Reversal of Previous Year Actual	(3,910,840)	(3,875,501)	(4,180,513)	(5,518,562)	(5,958,735)	(6,117,873)	(6,024,188)	(6,134,288)	(5,514,770)	(5,430,255)	(5,141,778)	(4,873,416)
L5 Net RBA Change	(228,852)	(1,049,273)	484,737	(70,559)	1,408,100	(677,078)	(1,547,411)	(1,818,348)	(1,030,891)	(721,859)	323,787	(2,077,243)
L6 Beginning RBA Balance	94,830,582	94,700,876	93,860,874	94,212,547	94,196,193	92,880,842	92,267,426	90,848,268	89,265,801	88,455,031	87,701,569	86,179,684
L7 End Balance Before Interest	94,803,810	94,651,603	94,155,811	94,141,968	92,793,083	92,183,763	90,720,018	89,020,912	87,333,175	86,179,684	85,115,359	84,102,651
L8 (L6 + L7) - 2 or (L6 + L7) - 2 - (1)	94,717,011	94,176,239	93,041,545	93,205,883	90,769,775	89,184,875	87,506,514	85,616,787	83,853,938	82,489,897	81,402,770	80,407,603
L9 L8 x 1.75% - 12	94,379	93,590	96,936	97,175	96,568	95,701	94,785	93,389	92,287	91,758	91,830	90,907
L10 L7 + L9	94,803,889	94,745,193	94,212,547	94,196,193	92,849,651	92,239,484	90,774,801	89,083,311	87,227,197	86,194,031	85,166,888	84,153,559

Target vs Actual Difference:  
Recorded Adjusted Revenues - Unadjusted  
Revised Revenues  
Target

40,445,741	39,888,701	41,328,526	43,277,375	45,900,594	46,583,655	45,458,699	46,193,656	46,193,656	43,033,461	42,808,991	41,131,344	38,988,462
40,445,730	39,888,091	41,328,516	43,277,361	45,900,582	46,583,614	45,458,669	46,193,616	46,193,616	43,033,447	42,808,981	41,131,334	38,988,454
44,120,429	42,712,929	45,981,776	48,725,408	50,451,219	52,004,449	49,933,476	50,508,746	50,508,746	47,517,340	47,517,340	46,590,907	41,784,635
3,683,699	2,824,228	4,653,250	5,448,047	4,550,627	5,440,835	4,474,817	4,314,928	4,314,928	4,483,893	4,708,389	5,459,573	2,796,181

AS REVISED

	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14	Jan-15	Feb-15
L1 Monthly Target Revenue	44,120,429	42,712,929	45,981,776	48,725,408	50,451,219	52,004,449	49,933,476	50,508,746	47,517,340	47,517,340	46,590,907	41,784,635
L2 Recorded Adjusted Revenue	40,445,730	39,888,091	41,328,516	43,277,361	45,900,582	46,583,614	45,458,669	46,193,616	43,033,447	42,808,981	41,131,334	38,988,454
L3 Target vs. Actual Revenue	3,683,699	2,824,228	4,653,260	5,448,047	4,550,637	5,440,835	4,474,817	4,314,928	4,483,893	4,708,389	5,459,573	2,796,181
L4 Reversal of Previous Year Actual	(3,910,840)	(3,875,501)	(4,180,513)	(5,518,562)	(5,958,735)	(6,117,873)	(6,024,188)	(6,134,288)	(5,514,770)	(5,430,255)	(5,141,778)	(4,873,416)
L5 Net RBA Change	(228,841)	(1,049,263)	484,747	(70,546)	1,408,086	(677,068)	(1,547,371)	(1,818,306)	(1,030,877)	(721,848)	323,797	(2,077,235)
L6 Beginning RBA Balance	94,831,082	94,701,468	93,861,417	94,213,000	94,196,771	92,881,423	92,268,009	90,848,846	89,266,522	88,455,787	87,702,315	86,180,851
L7 End Balance Before Interest	94,804,141	94,652,145	94,156,184	94,142,533	92,795,193	92,184,426	90,720,698	89,020,832	87,333,921	86,179,684	85,115,112	84,103,416
L8 (L6 + L7) - 2 or (L6 + L7) - 2 - (1)	94,717,611	94,176,778	93,042,265	93,206,255	90,769,132	89,184,264	87,506,919	85,617,215	83,854,383	82,490,140	81,403,228	80,408,068
L9 L8 x 1.75% - 12	94,380	93,591	96,938	97,176	96,569	95,701	94,785	93,390	92,288	91,759	91,831	90,908
L10 L7 + L9	94,808,521	94,745,736	94,213,100	94,196,731	92,850,232	92,240,109	90,776,463	89,084,022	87,227,933	86,197,743	85,168,619	84,154,324

Revised Adjustment to Revenue  
RBA Adjustment Recorded to Revenue  
Adjustment to Revenue

3,683,699	2,824,228	4,655,260	5,448,047	4,550,637	5,440,835	4,474,817	4,314,928	4,314,928	4,483,893	4,708,389	5,459,573	2,796,181
3,683,688	2,824,228	4,655,250	5,448,033	4,550,625	5,440,794	4,474,777	4,314,890	4,314,890	4,483,879	4,708,379	5,459,563	2,796,173
11	10	10	14	32	41	40	38	14	10	10	10	8

HECO-WP-B-016  
HAWAIIAN ELECTRIC COMPANY, INC.  
JAN 2017 ADJUSTMENT - MISCELLANEOUS R RATE BILLING ADJUSTMENT

REVENUE BALANCING ACCOUNT - REVENUE TRACKER

AS PREVIOUSLY STATED

	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-16
L1 Monthly Target Revenue	48,598,907	45,101,204	48,552,827	48,047,584	51,228,633	52,762,780	50,702,234	51,284,900	48,247,991	48,247,991	47,308,877
L2 Recorded Adjusted Revenue	42,716,780	42,125,471	43,533,624	41,894,933	47,281,470	49,462,260	47,377,556	45,960,513	48,028,232	45,122,645	43,233,334
L3 Target vs Actual Revenue	3,880,127	2,975,733	5,019,203	6,052,651	3,945,163	3,300,520	3,324,678	5,324,387	2,219,759	3,125,346	4,075,543
L4 Reversal of Previous Year Actual	(5,182,949)	(5,327,168)	(5,401,794)	(3,665,158)	(5,401,794)	(5,377,653)	(5,375,670)	(5,110,063)	(5,072,860)	(4,877,639)	(4,634,357)
L5 Net RBA Change	(1,312,822)	(2,351,435)	(1,380,589)	2,387,495	(1,366,771)	(2,247,082)	(2,050,392)	3,143,244	(2,852,629)	(1,752,293)	(559,814)
L6 Beginning RBA Balance	58,170,078	52,807,239	52,827,239	52,304,205	54,740,597	53,448,098	51,234,324	49,251,829	48,810,143	48,800,320	45,088,941
L7 End Balance Before Interest	54,858,146	52,858,114	52,344,650	54,891,689	53,363,826	51,169,813	49,183,686	48,568,125	48,757,235	45,048,027	44,529,927
L8 Balance Subject to Interest	33,913,845	32,628,740	32,003,118	32,091,898	33,029,599	31,064,348	30,872,681	30,183,944	28,435,416	28,065,078	27,374,083
L9 Interest	48,458	47,872	48,715	47,691	48,184	48,515	44,731	44,018	42,927	40,914	39,921
L10 Ending RBA Balance	54,907,504	52,907,186	52,291,365	54,739,350	53,431,988	51,248,428	49,228,416	48,610,143	48,800,162	45,088,941	44,589,848

Target vs Actual Difference

Recorded Adjusted Revenues - Unadjusted	42,716,780	42,125,471	43,533,624	41,894,944	47,281,491	49,462,260	47,377,603	45,960,541	48,028,249	45,122,645	43,233,334
Revised Revenues	42,716,780	42,125,463	43,533,624	41,894,933	47,281,470	49,462,260	47,377,556	45,960,513	48,028,232	45,122,634	43,233,323
Target	3,880,127	2,975,741	5,019,203	6,052,651	3,945,163	3,300,571	3,324,678	5,324,387	2,219,759	3,125,357	4,075,354

AS REVISED

	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-16
L1 Monthly Target Revenue	48,598,907	45,101,204	48,552,827	48,047,584	51,228,633	52,762,780	50,702,234	51,284,900	48,247,991	48,247,991	47,308,877
L2 Recorded Adjusted Revenue	42,716,780	42,125,463	43,533,624	41,894,933	47,281,470	49,462,260	47,377,556	45,960,513	48,028,232	45,122,634	43,233,323
L3 Target vs Actual Revenue	3,880,127	2,975,741	5,019,203	6,052,651	3,945,163	3,300,571	3,324,678	5,324,387	2,219,759	3,125,357	4,075,543
L4 Reversal of Previous Year Actual	(5,182,949)	(5,327,168)	(5,401,794)	(3,665,158)	(5,401,794)	(5,377,653)	(5,375,670)	(5,110,063)	(5,072,860)	(4,877,639)	(4,634,357)
L5 Net RBA Change	(1,312,822)	(2,351,435)	(1,380,589)	2,387,495	(1,366,771)	(2,247,082)	(2,050,392)	3,143,244	(2,852,629)	(1,752,293)	(559,814)
L6 Beginning RBA Balance	58,171,742	54,911,553	52,828,022	52,304,997	54,741,401	53,447,762	51,233,191	49,252,166	48,810,143	48,800,320	45,088,914
L7 End Balance Before Interest	54,858,920	52,860,086	52,245,441	54,892,482	53,364,630	51,200,880	49,184,589	48,568,125	48,757,235	45,048,027	44,529,911
L8 Balance Subject to Interest	33,914,316	32,627,215	32,003,599	32,092,383	33,027,086	31,064,513	30,873,225	30,184,513	28,435,997	28,065,688	27,374,681
L9 Interest	48,458	47,873	48,716	47,692	48,185	48,515	44,732	44,019	42,927	40,915	39,921
L10 Ending RBA Balance	54,908,378	52,907,959	52,292,157	54,740,154	53,432,795	51,247,265	49,229,331	48,611,067	48,801,123	45,089,914	44,570,832

Revised Adjustment to Revenue

RBA Adjustment Recorded to Revenue	3,880,127	2,975,741	5,019,203	6,052,651	3,945,163	3,300,571	3,324,678	5,324,387	2,219,759	3,125,357	4,075,354
Adjustment to Revenue	3,880,119	2,975,733	5,019,195	6,052,640	3,945,142	3,300,550	3,324,631	5,324,359	2,219,742	3,125,348	4,075,343
	8	8	8	11	21	41	47	28	17	11	11

HECO-WP-B-016  
HAWAIIAN ELECTRIC COMPANY, INC.  
JAN 2017 ADJUSTMENT - MISCELLANEOUS RATE BILLING ADJUSTMENT

REVENUE BALANCING ACCOUNT - REVENUE TRACKER

AS PREVIOUSLY STATED

	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16
L1 Monthly Target Revenue	42,407,239	47,308,877	45,793,747	49,268,788	50,202,658	51,980,760	53,581,111	51,447,350	52,040,081	48,957,982	48,957,982
L2 Recorded Adjusted Revenue	41,404,808	43,945,283	42,762,800	46,044,747	44,354,039	47,632,161	49,094,341	48,441,855	47,122,547	43,841,288	44,527,809
L3 Target vs Actual Revenue	1,002,431	3,363,594	3,030,947	3,224,041	5,848,619	4,348,603	3,886,804	5,005,528	4,917,514	5,016,674	4,430,153
L4 Reversal of Previous Year Actual	(4,381,515)	(4,548,813)	(4,608,612)	(4,848,387)	(3,762,637)	(4,131,765)	(4,323,881)	(4,085,854)	(4,075,714)	(3,758,832)	(3,844,438)
L5 Net RBA Change	(3,379,084)	(1,185,219)	(1,577,665)	(1,624,346)	(2,060,016)	(216,954)	(437,077)	919,664	841,800	1,279,842	585,715
L6 Beginning RBA Balance	41,980,001	41,970,775	40,635,218	39,078,265	37,538,672	36,671,282	36,973,860	38,377,108	40,342,811	41,291,426	42,903,748
L7 End Balance Before Interest	41,591,532	40,485,387	39,027,751	37,481,919	35,994,658	35,688,240	35,498,903	35,498,772	41,184,411	42,571,288	43,188,481
L8 End Balance Subject to Interest	26,385,422	25,064,680	24,333,053	23,360,507	22,580,507	24,301,458	24,255,871	25,330,387	24,902,429	25,615,860	26,205,535
L9 Interest	38,478	36,586	35,485	34,104	34,359	35,440	35,373	35,491	36,318	37,358	38,215
L10 Ending RBA Balance	41,530,011	40,520,971	39,062,213	37,516,023	36,625,247	36,973,680	36,521,976	40,332,263	41,220,727	42,608,624	43,227,677

Target vs Actual Difference:

Recorded Adjusted Revenues - Unadjusted	41,404,808	43,945,283	42,762,800	46,044,747	44,354,039	47,632,161	49,094,341	48,441,855	47,122,547	43,841,288	44,527,809
Revised Revenues	41,404,793	43,945,252	42,762,800	46,044,747	44,354,039	47,632,127	49,094,307	48,441,822	47,122,547	43,841,288	44,527,809
Target	42,407,239	47,308,877	45,793,747	49,268,788	50,202,658	51,980,760	53,581,111	51,447,350	52,040,081	48,957,982	48,957,982
	1,002,448	3,363,425	3,001,147	3,252,041	5,848,648	4,348,603	3,886,804	5,005,528	4,917,514	5,016,674	4,430,153
	(15)	(11)	(11)	(18)	(31)	(34)	(34)	(33)	(34)	(13)	(13)
Total RBA Adjustment											(1,162)

AS REVISED

	Feb-16	Mar-16	Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16
L1 Monthly Target Revenue	42,407,239	47,308,877	45,793,747	49,268,788	50,202,658	51,980,760	53,581,111	51,447,350	52,040,081	48,957,982	48,957,982
L2 Recorded Adjusted Revenue	41,404,793	43,945,252	42,762,800	46,044,747	44,354,039	47,632,127	49,094,307	48,441,822	47,122,547	43,841,288	44,527,809
L3 Target vs Actual Revenue	1,002,446	3,363,425	3,001,147	3,252,041	5,848,619	4,348,633	3,886,804	5,005,528	4,917,514	5,016,674	4,430,153
L4 Reversal of Previous Year Actual	(4,381,515)	(4,548,813)	(4,608,612)	(4,848,387)	(3,762,637)	(4,131,765)	(4,323,881)	(4,085,854)	(4,075,714)	(3,758,832)	(3,844,438)
L5 Net RBA Change	(3,379,069)	(1,185,388)	(1,607,465)	(1,586,346)	(2,060,016)	(216,954)	(437,077)	919,664	841,800	1,279,842	585,715
L6 Beginning RBA Balance	41,980,001	41,970,775	40,635,218	39,078,265	37,538,672	36,671,282	36,973,860	38,377,108	40,342,811	41,291,426	42,903,748
L7 End Balance Before Interest	41,591,532	40,485,387	39,027,751	37,481,919	35,994,658	35,688,240	35,498,903	35,498,772	41,184,411	42,571,288	43,188,481
L8 End Balance Subject to Interest	26,385,422	25,064,680	24,333,053	23,360,507	22,580,507	24,301,458	24,255,871	25,330,387	24,902,429	25,615,860	26,205,535
L9 Interest	38,478	36,586	35,485	34,104	34,359	35,440	35,373	35,491	36,318	37,358	38,215
L10 Ending RBA Balance	41,540,011	40,521,983	39,060,237	37,516,023	36,625,247	36,973,680	36,521,976	40,332,263	41,220,727	42,608,624	43,227,677

Revised Adjustment to Revenue  
RBA Adjustment Recorded to Revenue  
Adjustment to Revenue

1,002,446	3,363,425	3,001,147	3,252,041	5,848,648	4,348,603	3,886,804	5,005,528	4,917,514	4,917,514	5,016,674	4,430,153
1,002,431	3,363,414	3,001,138	3,252,025	5,848,617	4,348,629	3,886,770	5,005,495	4,917,480	4,917,480	5,016,661	4,430,153
15	11	11	18	31	34	34	33	34	34	13	13
											(1,162)

**DRAFT – PENDING RESPONSE FROM THE CONSUMER ADVOCATE**  
**Treatment of Billing Adjustments Going Forward**

The Hawaiian Electric Companies have agreed to implement the recommendation in the Consumer Advocate's statement of position on Transmittal Nos. 15-03, 15-04 and 15-05 to discontinue the presentation of customer billing adjustments in Schedule B of the decoupling RAM template in the Companies' annual decoupling tariff transmittals and the subsequent analyses by the Consumer Advocate of these adjustments.

In its statement of position, filed on May 15, 2015, the Consumer Advocate stated the following:

Through collaborative discussions with the Hawaiian Electric Companies and after review of information request responses, the Consumer Advocate has concluded and is recommending to the Commission that the extensive manual analyses of out-of-period customer billing adjustments, which [have] historically been undertaken by the Hawaiian Electric Companies, should be discontinued effective in 2015. Examples of customer billing adjustments and the analytic work performed can be observed in the "Adjustment" column of Schedule B, the footnotes on Schedule B and the multiple "WP-B-xx" documents supportive of these entries. Customer billing adjustments may involve movement of individual customers to a more appropriate rate schedule, with retroactive bill credits for applicable prior periods when an inappropriate schedule was employed or the identification and correction of meter reading or other billing errors. At the inception of decoupling, it was necessary to analyze the prior periods affected by such changes to allow only the prior billings months after decoupling inception to impact RBA balances. Now that several years have passed with decoupling in place, there is minimal risk of significant billing adjustments reaching back far enough to precede the inception of decoupling. Moreover, since the Hawaiian Electric Companies do not pay interest to individual customers who are found to have been charged under an inappropriate rate schedule in prior months, it is not necessary to analyze and add RBA interest to such billing corrections. Customer billing adjustments will flow naturally through the billed revenue accounts feeding into the calculation of recorded, adjusted revenues on Schedule B2 and the proposed elimination of the manual analysis of each adjustment to determine prior period months affected will significantly simplify RBA accounting efforts for the Hawaiian Electric Companies and corresponding review efforts for the Consumer Advocate and the Commission. The Hawaiian Electric Companies should continue to report each customer billing adjustment within its standard data responses prepared and submitted with each monthly RBA packet, so that individual adjustments can be selected for review by the Consumer Advocate, as necessary.

In response to the Consumer Advocate's recommendation, Order No. 32866, issued on May 28, 2015, stated the following:

The Consumer Advocate and the HECO Companies agree that accounting for billing adjustments in the RBA could be simplified by changes made on a prospective basis. The commission notes that this matter does not have to be resolved prior to any timely approval of the 2015 transmittals and proposed RBA Rate Adjustments. The HECO Companies may file proposed implementing



RBA tariff amendments based on language reviewed by and agreed to by the Consumer Advocate.

Thus, the Company proposes to delete the provision on billing adjustments in the RBA Provision tariff as shown on Attachment 1. Billing adjustments will not be reflected in the RBA filing prospectively effective upon agreement with the Consumer Advocate.<sup>1</sup>

Regarding the Consumer Advocate's recommendation on reporting, the Companies propose to report customer billing adjustments of \$50,000 or more in the monthly RBA packets, as \$50,000 is the current threshold to trigger interest recalculation.

---

<sup>1</sup> The Company informally sent the proposal described herein to the Consumer Advocate prior to the filing of this tariff transmittal.

Hawaiian Electric Company, Inc.

Bargaining Unit Wage Increase per Collective Bargaining Agreements - Effective January 1, 2011 and July 1, 2013

Wage Increases:	1/1/2011	1.75%	(Note 1)
(non-compounded)	1/1/2012	2.50%	(Note 1)
	1/1/2013	3.00%	(Note 1)
	1/1/2014	3.00%	(Note 2)
	1/1/2015	3.00%	(Note 2)
	1/1/2016	3.25%	(Note 2)
	1/1/2017	3.00%	(Note 2)

Increase effective			Increase Amount	Wage Rate With Increase	Labor Cost Escalation Rate	
			(a)	(b) or prev (b) + (a)	(c)	
					(b) / prev (b) -1	
1.00	1.75%	1/1/2011	0.0175	1.0175		
	2.50%	1/1/2012	0.0250	1.0425	0.0246	2.46%
	3.00%	1/1/2013	0.0300	1.0725	0.0288	2.88%
1.00	3.00%	1/1/2014	0.0300	1.0300		
	3.00%	1/1/2015	0.0300	1.0600	0.0291	2.91%
	3.25%	1/1/2016	0.0325	1.0925	0.0307	3.07%
	3.00%	1/1/2017	0.0300	1.1225	0.0275	2.75%

(1) Agreement ratified by the IBEW, Local 1260 on March 11, 2011, reflects a 1.75% increase effective 1/1/2011, 2.50% increase effective 1/1/2012, and 3.00% increase effective 1/1/2013. See HECO's Form 8-K dated March 11, 2011 filed with Securities and Exchange Commission at [www.hei.com](http://www.hei.com), under SEC filings.

(2) Agreement ratified by the IBEW, Local 1260 on November 1, 2012, reflects a 3.00% increase effective 1/1/2014, 1/1/2015 and 1/1/2017 and a 3.25% increase effective 1/1/2016, based on 1/1/2013 rates. See HECO's Form 10-Q dated November 8, 2012 filed with Securities and Exchange Commission at [www.hei.com](http://www.hei.com), under SEC filings. See also HECO-WP-C-003.

# Blue Chip Economic Indicators<sup>®</sup>

**Top Analysts' Forecasts of the U.S. Economic Outlook for the Year Ahead**  
**Vol. 42, No. 2, February 10, 2017**

## 2017 Real GDP Forecast Unchanged At 2.3% for A Third Month

FEBRUARY 2017 Forecast For 2017 SOURCE:	Percent Change 2017 From 2016 (Full Year-Over-Prior Year)										Average For 2017			Total Units-2017		-2017--
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
	Real GDP (Chained) (2009\$)	GDP Price Index	Nominal GDP (Cur.\$)	Consumer Price Index	Indust. Prod. (Total)	Dis. Pers. Income (2009\$)	Personal Cons. Exp. (2009\$)	Non-Res. Fix. Inv. (2009\$)	Corp. Profits (Cur.\$)	Treas. Bills 3-mo.	Treas. Notes 10-Year	Unempl. Rate (Civ.)	Housing Starts (Mil.)	Auto&Light Truck Sales (Mil.)	Net Exports (2009\$)	
	(2009\$)	Index	(Cur.\$)	Index	(Total)	(2009\$)	(2009\$)	(2009\$)	(Cur.\$)				(Mil.)	(Mil.)		
Moody's Analytics	2.6 H	1.6 L	4.6	2.8	1.3	2.0	3.2 H	3.6	3.6	0.6 L	2.9	4.7	1.41	17.5	-672.6 L	
Naroff Economic Advisors*	2.6 H	2.5 H	5.0 H	2.7	2.0	2.1	2.7	4.5 H	6.7	1.0	2.8	4.5	1.33	17.4	-651.0	
RBC Capital Markets	2.6 H	1.8	4.4	2.1 L	na	na	2.7	2.7	na	na	2.6	4.4 L	1.23	17.5	-603.0	
SOM Economics, Inc.	2.6 H	2.1	4.7	2.2	1.6	2.2	2.6	2.8	6.0	0.7	2.7	4.5	1.26	17.6	-586.0	
Turning Points (Micrometrics)	2.6 H	2.2	4.8	2.8	1.4	2.2	2.7	2.8	8.7	0.7	2.7	4.9	1.22	18.0 H	-526.1 H	
ACT Research	2.5	2.1	4.7	2.5	1.3	2.2	2.6	4.5 H	na	1.0	2.6	4.4 L	1.29	17.3	-652.4	
AIG	2.5	1.9	4.5	2.6	1.5	2.3	2.9	3.4	7.0	0.7	2.5	4.6	1.23	17.5	-613.8	
Amherst Pierpont Securities	2.5	2.1	4.6	2.9 H	1.2	2.3	2.7	3.1	6.0	1.1	2.9	4.6	1.28	17.4	-616.0	
Econoclast	2.5	2.1	4.6	2.5	1.8	2.4	2.8	3.0	5.1	0.8	2.8	4.6	1.29	17.3	-625.0	
MUFG Union Bank	2.5	1.9	4.4	2.9 H	2.1	na	2.7	4.0	7.0	1.0	2.7	4.6	1.35	17.7	-590.0	
Wells Capital Management	2.5	1.9	4.4	2.2	1.9	2.4	3.0	3.2	3.6	0.8	2.7	4.6	1.18	17.4	-634.0	
Action Economics	2.4	2.0	4.4	2.6	1.5	2.2	2.6	3.3	7.6	0.8	2.6	4.7	1.27	17.8	-621.3	
BMO Capital Markets*	2.4	1.9	4.4	2.7	1.7	2.3	2.9	2.7	6.3	0.7	2.6	4.4 L	1.32	17.2	-635.3	
Comerica*	2.4	1.9	4.4	2.6	0.9	1.9 L	2.2 L	3.9	na	0.7	2.7	4.7	1.23	17.2	-605.0	
High Frequency Economics	2.4	2.3	4.8	2.6	1.6	2.3	2.7	3.6	3.0	1.0	2.7	4.5	1.23	17.7	-616.3	
Inform - Univ. of Maryland	2.4	2.0	4.4	2.4	1.5	2.4	2.6	2.7	4.8	0.9	2.7	4.7	1.31	17.4	-596.0	
National Assn. of Home Builders	2.4	2.1	4.6	2.3	0.9	2.0	2.7	3.1	na	0.8	2.7	4.7	1.24	17.5	-615.0	
PNC Financial Services Group	2.4	2.0	4.5	2.3	1.8	2.7	2.7	2.3	na	0.8	2.7	4.5	1.20	17.5	-580.0	
Standard & Poors Corp.*	2.4	2.2	4.7	2.4	2.6	2.1	2.5	3.2	3.6	0.7	2.5	4.6	1.29	17.5	-548.1	
UBS	2.4	1.9	4.3	2.3	1.2	3.1	2.7	3.2	na	1.0	na	4.6	1.30	na	-634.0	
UCLA Business Forecasting Proj.*	2.4	2.3	5.0 H	2.5	0.8	3.9 H	3.0	4.2	5.0	1.6 H	2.7	4.7	1.21	17.4	-633.7	
BNP Paribas North America	2.3	1.9	4.2	2.4	4.5 H	na	2.5	3.0	na	0.7	2.8	4.6	na	na	-643.0	
Conference Board*	2.3	2.0	4.4	2.6	-1.0 L	2.1	2.6	2.8	2.6	0.9	2.6	4.6	1.28	17.2	-630.4	
Credit Suisse	2.3	1.9	4.2	2.2	1.2	na	2.3	2.7	na	na	2.8	4.6	na	na	-603.7	
Daiwa Capital Markets America	2.3	2.0	4.3	2.4	1.7	2.1	2.6	3.3	2.9	1.0	2.8	4.7	1.20	17.3	-634.0	
DS Economics	2.3	1.9	4.2	2.4	1.2	2.2	2.7	3.5	6.2	0.7	2.5	4.5	1.30	17.3	-636.0	
Economist Intelligence Unit	2.3	2.0	4.3	2.4	1.7	2.2	2.7	1.9	na	0.7	2.8	4.5	1.27	17.3	-580.0	
FedEx Corporation	2.3	2.0	4.6	2.5	1.5	2.3	2.7	3.0	5.4	0.8	2.6	4.7	1.27	17.6	-624.9	
General Motors	2.3	2.0	4.3	2.6	1.2	2.4	2.6	3.0	5.6	0.8	2.5	4.5	1.30	na	-622.4	
Georgia State University*	2.3	2.1	4.4	2.4	2.0	2.4	2.7	2.7	6.5	0.7	3.1 H	5.0 H	1.13	16.8	-654.9	
IHS Markit Economics	2.3	2.1	4.5	2.4	1.4	2.6	2.8	4.3	8.9	0.9	2.6	4.6	1.24	17.4	-629.6	
Macroeconomic Advisers, LLC**	2.3	1.9	4.2	2.4	1.2	2.2	2.7	3.6	6.3	0.7	2.5	4.5	1.33	17.4	-639.5	
National Assn. of Realtors	2.3	2.0	4.4	2.5	1.4	2.3	2.4	3.6	6.3	0.9	2.7	4.6	1.26	17.4	-610.0	
Point72 Asset Management*	2.3	2.0	4.4	2.6	2.2	2.1	2.4	3.9	4.7	0.9	2.6	4.4 L	1.25	17.6	-620.1	
Societe Generale	2.3	2.0	4.3	2.1 L	na	2.3	2.7	3.5	9.1 H	0.7	2.7	4.6	1.22	17.7	-644.0	
Oxford Economics	2.3	2.0	4.3	2.5	1.2	2.2	2.7	2.9	1.2 L	0.8	2.6	4.6	1.28	17.9	-611.3	
Ford Motor Company*	2.2	1.9	4.1	2.3	0.9	2.1	2.9	3.2	na	na	2.6	4.6	1.32	na	-654.0	
Goldman Sachs & Co.**	2.2	2.2	4.5	2.8	1.2	2.0	2.5	3.3	na	1.3	3.0	4.5	1.28	na	-632.9	
MacroFin Analytics	2.2	2.0	4.2	2.4	1.5	2.2	2.6	2.2	5.9	1.0	2.7	4.6	1.20	17.3	-592.0	
Moody's Capital Markets*	2.2	1.9	4.1	2.2	2.1	1.9 L	2.5	1.5	4.0	0.7	2.5	4.6	1.22	17.4	-607.0	
NatWest Markets	2.2	2.0	4.3	2.4	1.2	1.9 L	2.6	2.6	6.0	0.8	2.6	4.6	1.33	17.0	-625.0	
Regions Financial Corporation	2.2	2.1	4.4	2.6	1.4	2.2	2.5	2.9	2.6	0.8	2.6	4.6	1.19	17.1	-596.1	
Swiss Re	2.2	1.8	4.0	2.5	1.9	2.7	2.7	2.9	6.7	0.7	2.5	4.6	1.27	16.2 L	-662.2	
U.S. Chamber of Commerce	2.2	1.9	4.1	2.1 L	1.2	2.2	2.6	2.2	4.0	0.9	2.6	4.8	1.26	na	-642.2	
Wells Fargo	2.2	2.1	4.2	2.5	1.5	2.2	2.7	3.4	2.5	0.8	2.5	4.7	1.22	17.1	-653.3	
Bank of America Merrill Lynch	2.1 L	1.9	4.1	2.5	1.3	na	2.6	3.5	na	0.7	2.6	4.6	1.23	17.6	-638.5	
Barclays*	2.1 L	2.1	4.3	2.4	na	na	2.6	1.3 L	na	na	2.3 L	4.6	1.29	na	-610.0	
Eaton Corporation	2.1 L	2.0	4.1	2.5	1.2	2.5	2.7	2.3	na	0.7	2.4	4.9	1.24	17.1	-614.7	
Fannie Mae	2.1 L	1.8	3.9	2.4	1.1	2.2	2.7	2.5	4.9	0.9	2.6	4.6	1.24	17.2	-634.6	
J.P. MorganChase	2.1 L	2.0	4.1	2.5	1.2	2.5	2.5	1.3 L	4.9	na	2.5	4.6	1.25	17.3	-641.9	
Morgan Stanley*	2.1 L	1.7	3.8 L	2.5	2.7	2.4	2.6	3.2	na	0.7	2.6	4.7	1.31	na	-624.1	
Nomura Securities	2.1 L	1.7	3.8 L	2.7	1.4	2.2	2.4	3.4	na	na	2.6	4.7	1.35	17.2	-634.2	
Northern Trust Company*	2.1 L	2.1	4.3	2.4	1.9	na	2.5	2.6	na	0.8	2.8	4.7	1.28	17.5	-561.7	
RDQ Economics	2.1 L	2.0	4.2	2.6	1.3	2.6	2.6	2.9	3.1	1.1	2.8	4.5	1.20	18.0	-644.9	
2017 Consensus: February Avg.	2.3	2.0	4.4	2.5	1.5	2.3	2.7	3.0	5.3	0.8	2.7	4.6	1.26	17.4	-620.5	
Top 10 Avg.	2.6	2.2	4.8	2.8	2.4	2.7	2.9	4.0	7.5	1.1	2.9	4.8	1.34	17.8	-575.6	
Bottom 10 Avg.	2.1	1.8	4.0	2.2	0.8	2.0	2.4	2.0	3.2	0.7	2.5	4.5	1.20	17.0	-653.2	
January Avg.	2.3	2.0	4.4	2.4	1.5	2.4	2.6	2.9	5.0	0.9	2.7	4.6	1.26	17.3	-599.0	
Historical data 2013	1.7	1.6	3.3	1.5	1.9	-1.4	1.5	3.5	1.7	0.1	2.4	7.4	0.92	15.5	-404.9	
2014	2.4	1.8	4.2	1.6	2.9	3.5	2.9	6.0	5.9	0.0	2.5	6.2	1.00	16.4	-425.7	
2015	2.6	1.1	3.7	0.1	0.3	3.5	3.2	2.1	-3.0	0.1	2.2	5.3	1.11	17.4	-540.0	
2016	1.6	1.3	2.9	1.3	-1.0	2.7	2.7	-0.4	na	0.3	1.8	4.9	1.17	17.5	-561.6	
Number Of Forecasts Changed From A Month Ago:																
Down	17	17	26	15	16	20	14	14	10	12	8	7	8	4	41	
Same	31	25	16	20	18	15	19	8	14	32	32	37	32	25	9	
Up	6	12	12	19	16	12	21	32	12	4	13	10	12	16	4	
February Median	2.3	2.0	4.4	2.5	1.4	2.2	2.7	3.1	5.4	0.8	2.6	4.6	1.27	17.4	-625.0	
February Diffusion Index	40 %	45 %	37 %	54 %	50 %	41 %	56 %	67 %	53 %	42 %	55 %	53 %	54 %	63 %	16 %	

\*Former winner of annual Lawrence R. Klein Award for Blue Chip Forecast Accuracy. \*\*Denotes two-time winner.

# HAWAIIAN ELECTRIC COMPANY, INC.

## EXHIBIT A

		3.00%		3.00%		3.25%		3.00%					
JOB CODE	JOB TITLE	1/1/2013	7/1/2013	1/1/2014	7/1/2014	1/1/2015	7/1/2015	1/1/2016	7/1/2016	1/1/2017	7/1/2017	1/1/2018	7/1/2018
TL285	FACILITY OPERATIONS MECHANIC												
	1st 3 mos.	20.83		21.45		22.07		22.75		23.37		23.99	
	Next 3 mos.	21.84		22.50		23.16		23.87		24.53		25.19	
	Next 6 mos.	22.91		23.60		24.29		25.03		25.72		26.41	
	Next 6 mos.	24.06		24.78		25.50		26.28		27.00		27.72	
	Thereafter	25.26		26.02		26.78		27.60		28.36		29.12	
CL829	CASHIER												
	1st 3 mos.	20.39		21.00		21.61		22.27		22.88		23.49	
	Next 3 mos.	21.32		21.96		22.60		23.29		23.93		24.57	
	Next 3 mos.	22.42		23.09		23.76		24.49		25.16		25.83	
	Next 6 mos.	23.50		24.21		24.92		25.68		26.39		27.10	
	Next 6 mos.	24.65		25.39		26.13		26.93		27.67		28.41	
	Thereafter	25.86		26.64		27.42		28.26		29.04		29.82	
CLC05	SR INFORMATION STORAGE EQUIPMENT OPERATOR												
CL18	SYSTEM OPERATION CLERK												
CL20	TEST AND SUBSTATION CLERK												
CL22	DESKTOP PUBLISHING OPERATOR												
CL104	POWER PLANT CLERK												
CL257	MOTOR FLEET CLERK												
CL328	METER CLERK												
CL21	PRINT PRODUCTION OPERATOR												
CL684	COMPUTER SYSTEMS OPERATOR TRAINEE												
	1st 3 mos.	20.83		21.45		22.07		22.75		23.37		23.99	
	Next 3 mos.	21.84		22.50		23.16		23.87		24.53		25.19	
	Next 3 mos.	22.91		23.60		24.29		25.03		25.72		26.41	
	Next 6 mos.	24.06		24.78		25.50		26.28		27.00		27.72	
	Next 6 mos.	25.26		26.02		26.78		27.60		28.36		29.12	
	Thereafter	26.47		27.26		28.05		28.91		29.70		30.49	
TL180	CONDENSER CLEANER												
	1st 6 mos.	22.91		23.60		24.29		25.03		25.72		26.41	
	Next 6 mos.	24.06		24.78		25.50		26.28		27.00		27.72	
	Next 6 mos.	25.26		26.02		26.78		27.60		28.36		29.12	
	Thereafter	26.47		27.26		28.05		28.91		29.70		30.49	
CLA49	PROJECT CLERK												
CLA81	STANDARDS CLERK												
CL12	JOINT POLE AIDE												
CL13	PROJECT CLERK												
CL15	FIELD SERVICE CLERK												
	1st 3 mos.	21.32		21.96		22.60		23.29		23.93		24.57	
	Next 3 mos.	22.42		23.09		23.76		24.49		25.16		25.83	
	Next 3 mos.	23.50		24.21		24.92		25.68		26.39		27.10	
	Next 6 mos.	24.65		25.39		26.13		26.93		27.67		28.41	
	Next 6 mos.	25.86		26.64		27.42		28.26		29.04		29.82	
	Thereafter	27.17		27.99		28.81		29.69		30.51		31.33	
T335	TRUCK DRIVER A	27.21		28.03		28.85		29.73		30.55		31.37	
CL406	METER READER												
	1st 3 mos.	20.83 x 1.030 =		21.45 x 1.0291 =		22.07 x 1.0307 =		22.75 x 1.0275 =		23.37		23.99	
	Next 3 mos.	21.84		22.50		23.16		23.87		24.53		25.19	
	Next 6 mos.	24.06		24.78		25.50		26.28		27.00		27.72	
	Next 6 mos.	25.26		26.02		26.78		27.60		28.36		29.12	
	Next 6 mos.	26.47		27.26		28.05		28.91		29.70		30.49	
	Thereafter	27.81		28.64		29.47		30.37		31.20		32.03	
CL23	CUSTOMER TECHNOLOGY CLERK												
CL1013	INVOICE PAYMENT CLERK												
CL17	FUELS RECORDS CLERK												
	1st 3 mos.	22.42 x 1.030 =		23.09 x 1.0291 =		23.76 x 1.0307 =		24.49 x 1.0275 =		25.16		25.83	
	Next 3 mos.	23.50		24.21		24.92		25.68		26.39		27.10	
	Next 3 mos.	24.65		25.39		26.13		26.93		27.67		28.41	
	Next 6 mos.	25.86		26.64		27.42		28.26		29.04		29.82	
	Next 6 mos.	27.17		27.99		28.81		29.69		30.51		31.33	
	Thereafter	28.51		29.37		30.23		31.16		32.02		32.88	
CL1011	PURCHASING CLERK												
	1st 3 mos.	23.50		24.21		24.92		25.68		26.39		27.10	
	Next 3 mos.	24.65		25.39		26.13		26.93		27.67		28.41	
	Next 6 mos.	25.86		26.64		27.42		28.26		29.04		29.82	
	Next 6 mos.	27.17		27.99		28.81		29.69		30.51		31.33	
	Thereafter	28.51		29.37		30.23		31.16		32.02		32.88	

Hawaiian Electric Company, Inc.  
CIP CT-1 in 2017 RAM Calculations  
HECO Summary  
(\$ in 000's)

Line	Description	Rate Base CIP CT-1 Cost Recoverable at 12/31/16 (Note 1)	2017 Activities			Rate Base CIP CT-1 Cost Recoverable at 12/31/17
			Additions (12 months)	Amortization (12 months) (Note 2)	Net Change	
1	Depreciation deferral	\$ 607	\$ -	\$ (251)	\$ (251)	\$ 356
2	Carrying charge (AFUDC)	1,699	-	(703)	(703)	996
3 = 1 + 2	CIP CT-1 deferred costs recoverable	\$ 2,306		\$ (954)	\$ (954)	\$ 1,352
		To Sch D1, K1		To Sch E	To Sch D1, K1	To Sch D1, K1

(1) See Transmittal No. 16-01 (Decoupling) - Hawaiian Electric Company RBA Rate Adjustment, HECO-WP-D1-001A, filed on March 31, 2016.

(2) Amortized over 6 years, per Exhibit 1, page 1 of 3 of the Hawaiian Electric 2009 Test Year Rate Case Stipulated Settlement Agreement between the Hawaiian Electric Companies and the Division of Consumer Advocacy regarding Certain Regulatory Matters, filed January 28, 2013 in Docket No. 2008-0083. Amortization of CIP CT-1 began May 2013. Refer to CIP CT-1 amortization schedule attached.

(3) Amounts may not add up due to rounding.

Hawaiian Electric Company, Inc.  
CIP CT-1 in 2017 RAM Calculations  
CIP CT-1 Amortization Schedule  
(\$ in 000's)

Amort. Period	AFUDC Equity	AFUDC Equity-Contrib	Depreciation	AFUDC Debt	AFUDC Full Debt Cost		Depreciation Deferral	Depreciation Deferral (rounded)	Carrying Charge	Carrying Charge (rounded)
	72 months	72 months	72 months	72 months	72 months			1,507,942	1,508	4,218,274
Reg Asset Balance per GL						Total				
Bal. 5/2013	2,947,722	(2,947,722)	1,507,942	1,270,552	1,482,193	4,240,687				
Debit:	40330018	18670123	40330018	40330018	40330018	Monthly Amort	Depreciation Deferral			
Credit:	18670122	40330018	18670120	18670121	18670125					
1 Jun-13 (40,940.58)	2,900,781	40,940.58 (2,900,781)	(20,943.64) 1,488,998	(17,648.56) 1,252,905	(20,308.24) 1,441,885	(58,898)	1 Jun-13	1,488,998	1,487	4,156,687
19 Dec-14 (40,940.58)	2,169,851	40,940.58 (2,169,851)	(20,943.64) 1,110,013	(17,648.56) 935,287	(20,308.24) 1,078,337		19 Dec-14	1,110,013	1,110	3,105,118
20 Jan-15 (40,940.58)	2,128,910	40,940.58 (2,128,910)	(20,943.64) 1,089,069	(17,648.56) 917,821	(20,308.24) 1,056,028		20 Jan-15	1,089,069	1,089	3,046,531
21 Feb-15 (40,940.58)	2,087,970	40,940.58 (2,087,970)	(20,943.64) 1,068,128	(17,648.56) 899,074	(20,308.24) 1,035,720		21 Feb-15	1,068,128	1,068	2,987,944
22 Mar-15 (40,940.58)	2,047,029	40,940.58 (2,047,029)	(20,943.64) 1,047,182	(17,648.56) 882,328	(20,308.24) 1,015,412		22 Mar-15	1,047,182	1,047	2,929,357
23 Apr-15 (40,940.58)	2,006,089	40,940.58 (2,006,089)	(20,943.64) 1,026,238	(17,648.56) 864,681	(20,308.24) 995,104		23 Apr-15	1,026,238	1,026	2,870,770
24 May-15 (40,940.58)	1,965,148	40,940.58 (1,965,148)	(20,943.64) 1,005,295	(17,648.56) 847,035	(20,308.24) 974,795		24 May-15	1,005,295	1,005	2,812,183
25 Jun-15 (40,940.58)	1,924,207	40,940.58 (1,924,207)	(20,943.64) 984,351	(17,648.56) 829,388	(20,308.24) 954,487		25 Jun-15	984,351	984	2,753,596
26 Jul-15 (40,940.58)	1,883,267	40,940.58 (1,883,267)	(20,943.64) 963,407	(17,648.56) 811,742	(20,308.24) 934,179		26 Jul-15	963,407	963	2,695,008
27 Aug-15 (40,940.58)	1,842,326	40,940.58 (1,842,326)	(20,943.64) 942,464	(17,648.56) 794,095	(20,308.24) 913,871		27 Aug-15	942,464	942	2,636,421
28 Sep-15 (40,940.58)	1,801,386	40,940.58 (1,801,386)	(20,943.64) 921,520	(17,648.56) 776,448	(20,308.24) 893,562		28 Sep-15	921,520	922	2,577,834
29 Oct-15 (40,940.58)	1,760,445	40,940.58 (1,760,445)	(20,943.64) 900,576	(17,648.56) 758,802	(20,308.24) 873,254		29 Oct-15	900,576	901	2,519,247
30 Nov-15 (40,940.58)	1,719,505	40,940.58 (1,719,505)	(20,943.64) 879,633	(17,648.56) 741,155	(20,308.24) 852,945		30 Nov-15	879,633	880	2,460,660
31 Dec-15 (40,940.58)	1,678,564	40,940.58 (1,678,564)	(20,943.64) 858,689	(17,648.56) 723,509	(20,308.24) 832,638		31 Dec-15	858,689	859	2,402,073
32 Jan-16 (40,940.58)	1,637,623	40,940.58 (1,637,623)	(20,943.64) 837,746	(17,648.56) 705,862	(20,308.24) 812,329		32 Jan-16	837,746	838	2,343,486
33 Feb-16 (40,940.58)	1,596,683	40,940.58 (1,596,683)	(20,943.64) 816,802	(17,648.56) 688,216	(20,308.24) 792,021		33 Feb-16	816,802	817	2,284,898
34 Mar-16 (40,940.58)	1,555,742	40,940.58 (1,555,742)	(20,943.64) 795,858	(17,648.56) 670,569	(20,308.24) 771,713		34 Mar-16	795,858	796	2,226,311
35 Apr-16 (40,940.58)	1,514,802	40,940.58 (1,514,802)	(20,943.64) 774,915	(17,648.56) 652,923	(20,308.24) 751,405		35 Apr-16	774,915	775	2,167,724
36 May-16 (40,940.58)	1,473,861	40,940.58 (1,473,861)	(20,943.64) 753,971	(17,648.56) 635,276	(20,308.24) 731,097		36 May-16	753,971	754	2,109,137
37 Jun-16 (40,940.58)	1,432,920	40,940.58 (1,432,920)	(20,943.64) 733,027	(17,648.56) 617,629	(20,308.24) 710,788		37 Jun-16	733,027	733	2,050,550
38 Jul-16 (40,940.58)	1,391,980	40,940.58 (1,391,980)	(20,943.64) 712,084	(17,648.56) 599,983	(20,308.24) 690,480		38 Jul-16	712,084	712	1,991,963
39 Aug-16 (40,940.58)	1,351,039	40,940.58 (1,351,039)	(20,943.64) 691,140	(17,648.56) 582,336	(20,308.24) 670,172		39 Aug-16	691,140	691	1,933,376
40 Sep-16 (40,940.58)	1,310,099	40,940.58 (1,310,099)	(20,943.64) 670,196	(17,648.56) 564,690	(20,308.24) 649,864		40 Sep-16	670,196	670	1,874,789
41 Oct-16 (40,940.58)	1,269,158	40,940.58 (1,269,158)	(20,943.64) 649,253	(17,648.56) 547,043	(20,308.24) 629,555		41 Oct-16	649,253	649	1,816,201
42 Nov-16 (40,940.58)	1,228,218	40,940.58 (1,228,218)	(20,943.64) 628,309	(17,648.56) 529,397	(20,308.24) 609,247		42 Nov-16	628,309	628	1,757,614
43 Dec-16 (40,940.58)	1,187,277	40,940.58 (1,187,277)	(20,943.64) 607,366	(17,648.56) 511,750	(20,308.24) 588,938		43 Dec-16	607,366	607	1,699,027
44 Jan-17 (40,940.58)	1,146,336	40,940.58 (1,146,336)	(20,943.64) 586,422	(17,648.56) 494,104	(20,308.24) 568,631		44 Jan-17	586,422	586	1,640,440
45 Feb-17 (40,940.58)	1,105,395	40,940.58 (1,105,395)	(20,943.64) 565,478	(17,648.56) 476,457	(20,308.24) 548,323		45 Feb-17	565,478	565	1,581,853
46 Mar-17 (40,940.58)	1,064,455	40,940.58 (1,064,455)	(20,943.64) 544,535	(17,648.56) 458,810	(20,308.24) 528,014		46 Mar-17	544,535	545	1,523,266
47 Apr-17 (40,940.58)	1,023,515	40,940.58 (1,023,515)	(20,943.64) 523,591	(17,648.56) 441,164	(20,308.24) 507,706		47 Apr-17	523,591	524	1,464,678
48 May-17 (40,940.58)	982,574	40,940.58 (982,574)	(20,943.64) 502,647	(17,648.56) 423,517	(20,308.24) 487,398		48 May-17	502,647	503	1,406,091
49 Jun-17 (40,940.58)	941,633	40,940.58 (941,633)	(20,943.64) 481,704	(17,648.56) 405,871	(20,308.24) 467,089		49 Jun-17	481,704	482	1,347,504
50 Jul-17 (40,940.58)	900,693	40,940.58 (900,693)	(20,943.64) 460,760	(17,648.56) 388,224	(20,308.24) 446,781		50 Jul-17	460,760	461	1,288,917
51 Aug-17 (40,940.58)	859,752	40,940.58 (859,752)	(20,943.64) 439,816	(17,648.56) 370,578	(20,308.24) 426,473		51 Aug-17	439,816	440	1,230,330
52 Sep-17 (40,940.58)	818,812	40,940.58 (818,812)	(20,943.64) 418,873	(17,648.56) 352,931	(20,308.24) 406,165		52 Sep-17	418,873	419	1,171,743
53 Oct-17 (40,940.58)	777,871	40,940.58 (777,871)	(20,943.64) 397,929	(17,648.56) 335,285	(20,308.24) 385,858		53 Oct-17	397,929	398	1,113,156
54 Nov-17 (40,940.58)	736,930	40,940.58 (736,930)	(20,943.64) 376,985	(17,648.56) 317,638	(20,308.24) 365,548		54 Nov-17	376,985	377	1,054,569
55 Dec-17 (40,940.58)	695,990	40,940.58 (695,990)	(20,943.64) 356,042	(17,648.56) 299,991	(20,308.24) 345,240		55 Dec-17	356,042	356	995,981
56 Jan-18 (40,940.58)	655,049	40,940.58 (655,049)	(20,943.64) 335,098	(17,648.56) 282,345	(20,308.24) 324,932		56 Jan-18	335,098	335	937,394
57 Feb-18 (40,940.58)	614,109	40,940.58 (614,109)	(20,943.64) 314,155	(17,648.56) 264,698	(20,308.24) 304,624		57 Feb-18	314,155	314	878,807
58 Mar-18 (40,940.58)	573,168	40,940.58 (573,168)	(20,943.64) 293,211	(17,648.56) 247,052	(20,308.24) 284,315		58 Mar-18	293,211	293	820,220
59 Apr-18 (40,940.58)	532,228	40,940.58 (532,228)	(20,943.64) 272,267	(17,648.56) 229,405	(20,308.24) 264,007		59 Apr-18	272,267	272	761,633
60 May-18 (40,940.58)	491,287	40,940.58 (491,287)	(20,943.64) 251,324	(17,648.56) 211,759	(20,308.24) 243,699		60 May-18	251,324	251	703,046
61 Jun-18 (40,940.58)	450,346	40,940.58 (450,346)	(20,943.64) 230,380	(17,648.56) 194,112	(20,308.24) 223,391		61 Jun-18	230,380	230	644,459
62 Jul-18 (40,940.58)	409,406	40,940.58 (409,406)	(20,943.64) 209,436	(17,648.56) 176,466	(20,308.24) 203,082		62 Jul-18	209,436	209	585,871
63 Aug-18 (40,940.58)	368,465	40,940.58 (368,465)	(20,943.64) 188,493	(17,648.56) 158,819	(20,308.24) 182,774		63 Aug-18	188,493	188	527,284
64 Sep-18 (40,940.58)	327,525	40,940.58 (327,525)	(20,943.64) 167,549	(17,648.56) 141,172	(20,308.24) 162,466		64 Sep-18	167,549	168	468,697
65 Oct-18 (40,940.58)	286,584	40,940.58 (286,584)	(20,943.64) 146,605	(17,648.56) 123,526	(20,308.24) 142,158		65 Oct-18	146,605	147	410,110
66 Nov-18 (40,940.58)	245,643	40,940.58 (245,643)	(20,943.64) 125,662	(17,648.56) 105,879	(20,308.24) 121,849		66 Nov-18	125,662	126	351,523
67 Dec-18 (40,940.58)	204,703	40,940.58 (204,703)	(20,943.64) 104,718	(17,648.56) 88,233	(20,308.24) 101,541		67 Dec-18	104,718	105	292,936
68 Jan-19 (40,940.58)	163,762	40,940.58 (163,762)	(20,943.64) 83,775	(17,648.56) 70,586	(20,308.24) 81,233		68 Jan-19	83,775	84	234,349
69 Feb-19 (40,940.58)	122,822	40,940.58 (122,822)	(20,943.64) 62,831	(17,648.56) 52,940	(20,308.24) 60,925		69 Feb-19	62,831	63	175,761
70 Mar-19 (40,940.58)	81,881	40,940.58 (81,881)	(20,943.64) 41,887	(17,648.56) 35,293	(20,308.24) 40,618		70 Mar-19	41,887	42	117,174
71 Apr-19 (40,940.58)	40,941	40,940.58 (40,941)	(20,943.64) 20,944	(17,648.56) 17,647	(20,308.24) 20,308		71 Apr-19	20,944	21	58,567
72 May-19 (40,940.58)	(0.00)	40,940.58 (0.00)	(20,943.64) (0.00)	(17,648.56) 0.00	(20,308.24) 0.00		72 May-19	(0)	(0)	0

Hawaiian Electric Company, Inc.  
CIS in 2017 RAM Calculations  
HECO Summary  
(\$ in 000's)

Line	Description	Rate Base CIS Deferred Costs		2017 Activities		Rate Base CIS Deferred Costs	
		Recoverable at 12/31/16 (Note 1)	Additions (12 months) (Note 2)	Amortization (12 months) (Note 2)	Net Change	Recoverable at 12/31/17	
1	CIS Deferred Cost	\$ 27,301	\$ -	\$ (3,245)	\$ (3,245)	\$ 24,056	
2	CIS Deferred O&M Reclass	\$ 1,737	\$ -	\$ (206)	\$ (206)	\$ 1,531	
3	Carrying charges	\$ 1,567	\$ -	\$ (186)	\$ (186)	\$ 1,381	
4	Write-Off	\$ (20,339)	\$ -	\$ 2,417	\$ 2,417	\$ (17,922)	
5 = sum 1 - 4	CIS deferred costs recoverable	\$ 10,266	\$ -	\$ (1,220)	\$ (1,220)	\$ 9,046	
		To Sch D1, K1		To Sch E To Sch D1, K1		To Sch D1, K1	

(1) See Transmittal No. 16-01 (Decoupling) - Hawaiian Electric Company RBA Rate Adjustment, HECO-WP-D1-001B, filed on March 31, 2016.

(2) Amortized over 12 years, per Exhibit 1, page 2 of 3, footnote 2 of the Hawaiian Electric 2009 Test Year Rate Case Stipulated Settlement Agreement between the Hawaiian Electric Companies and the Division of Consumer Advocacy regarding Certain Regulatory Matters, filed January 28, 2013 in Docket No. 2008-0083. Refer to CIS Amortization schedule included.

(3) Amounts may not add up due to rounding.



Hawaiian Electric Company, Inc.  
CIS in 2017 RAM Calculations  
CIS Amortization Schedule  
(\$ in 000's)

		CIS Final Cost - Amort (Rate Base Impact)		Rounded	
Amort. Period	144 months				
Reg Asset Balance per GL					
Bal. 5/2013	14,636,585				
1	Jun-13	(101,642.95)	14,534,942.19		
2	Jul-13	(101,642.95)	14,433,299.24		
3	Aug-13	(101,642.95)	14,331,656.28		
4	Sep-13	(101,642.95)	14,230,013.33		
5	Oct-13	(101,642.95)	14,128,370.38		
6	Nov-13	(101,642.95)	14,026,727.43		
7	Dec-13	(101,642.95)	13,925,084.47	(102)	13,925
8	Jan-14	(101,642.95)	13,823,441.52		
9	Feb-14	(101,642.95)	13,721,798.57		
10	Mar-14	(101,642.95)	13,620,155.62		
11	Apr-14	(101,642.95)	13,518,512.66		
12	May-14	(101,642.95)	13,416,869.71		
13	Jun-14	(101,642.95)	13,315,226.76		
14	Jul-14	(101,642.95)	13,213,583.81		
15	Aug-14	(101,642.95)	13,111,940.85		
16	Sep-14	(101,642.95)	13,010,297.90		
17	Oct-14	(101,642.95)	12,908,654.95		
18	Nov-14	(101,642.95)	12,807,012.00		
19	Dec-14	(101,642.95)	12,705,369.05	(102)	12,705
20	Jan-15	(101,642.95)	12,603,726.09		
21	Feb-15	(101,642.95)	12,502,083.14		
22	Mar-15	(101,642.95)	12,400,440.19		
23	Apr-15	(101,642.95)	12,298,797.24		
24	May-15	(101,642.95)	12,197,154.28		
25	Jun-15	(101,642.95)	12,095,511.33		
26	Jul-15	(101,642.95)	11,993,868.38		
27	Aug-15	(101,642.95)	11,892,225.43		
28	Sep-15	(101,642.95)	11,790,582.47		
29	Oct-15	(101,642.95)	11,688,939.52		
30	Nov-15	(101,642.95)	11,587,296.57		
31	Dec-15	(101,642.95)	11,485,653.62	(102)	11,486
32	Jan-16	(101,642.95)	11,384,010.66		
33	Feb-16	(101,642.95)	11,282,367.71		
34	Mar-16	(101,642.95)	11,180,724.76		
35	Apr-16	(101,642.95)	11,079,081.81		
36	May-16	(101,642.95)	10,977,438.86		
37	Jun-16	(101,642.95)	10,875,795.90		
38	Jul-16	(101,642.95)	10,774,152.95		
39	Aug-16	(101,642.95)	10,672,510.00		
40	Sep-16	(101,642.95)	10,570,867.05		
41	Oct-16	(101,642.95)	10,469,224.09		
42	Nov-16	(101,642.95)	10,367,581.14		
43	Dec-16	(101,642.95)	10,265,938.19	(102)	10,266

Hawaiian Electric Company, Inc.  
CIS in 2017 RAM Calculations  
CIS Amortization Schedule (continued)  
(\$ in 000's)

		CIS Final Cost - Amort (Rate Base Impact)	Rounded	
44	Jan-17	(101,642.95)	10,164,295.24	
45	Feb-17	(101,642.95)	10,062,652.28	
46	Mar-17	(101,642.95)	9,961,009.33	
47	Apr-17	(101,642.95)	9,859,366.38	
48	May-17	(101,642.95)	9,757,723.43	
49	Jun-17	(101,642.95)	9,656,080.47	Yearly Amortization
50	Jul-17	(101,642.95)	9,554,437.52	(1,220)
51	Aug-17	(101,642.95)	9,452,794.57	
52	Sep-17	(101,642.95)	9,351,151.62	
53	Oct-17	(101,642.95)	9,249,508.66	
54	Nov-17	(101,642.95)	9,147,865.71	
55	Dec-17	(101,642.95)	9,046,222.76	(102) 9,046
56	Jan-18	(101,642.95)	8,944,579.81	
57	Feb-18	(101,642.95)	8,842,936.86	
58	Mar-18	(101,642.95)	8,741,293.90	
59	Apr-18	(101,642.95)	8,639,650.95	
60	May-18	(101,642.95)	8,538,008.00	
61	Jun-18	(101,642.95)	8,436,365.05	
62	Jul-18	(101,642.95)	8,334,722.09	
63	Aug-18	(101,642.95)	8,233,079.14	
64	Sep-18	(101,642.95)	8,131,436.19	
65	Oct-18	(101,642.95)	8,029,793.24	
66	Nov-18	(101,642.95)	7,928,150.28	
67	Dec-18	(101,642.95)	7,826,507.33	
68	Jan-19	(101,642.95)	7,724,864.38	
69	Feb-19	(101,642.95)	7,623,221.43	
70	Mar-19	(101,642.95)	7,521,578.47	
71	Apr-19	(101,642.95)	7,419,935.52	
72	May-19	(101,642.95)	7,318,292.57	
73	Jun-19	(101,642.95)	7,216,649.62	
74	Jul-19	(101,642.95)	7,115,006.67	
75	Aug-19	(101,642.95)	7,013,363.71	
76	Sep-19	(101,642.95)	6,911,720.76	
77	Oct-19	(101,642.95)	6,810,077.81	
78	Nov-19	(101,642.95)	6,708,434.86	
79	Dec-19	(101,642.95)	6,606,791.90	
80	Jan-20	(101,642.95)	6,505,148.95	
81	Feb-20	(101,642.95)	6,403,506.00	
82	Mar-20	(101,642.95)	6,301,863.05	
83	Apr-20	(101,642.95)	6,200,220.09	
84	May-20	(101,642.95)	6,098,577.14	
85	Jun-20	(101,642.95)	5,996,934.19	
86	Jul-20	(101,642.95)	5,895,291.24	
87	Aug-20	(101,642.95)	5,793,648.28	
88	Sep-20	(101,642.95)	5,692,005.33	
89	Oct-20	(101,642.95)	5,590,362.38	
90	Nov-20	(101,642.95)	5,488,719.43	
91	Dec-20	(101,642.95)	5,387,076.48	

Hawaiian Electric Company, Inc.  
CIS in 2017 RAM Calculations  
CIS Amortization Schedule (continued)  
(\$ in 000's)

		CIS Final Cost - Amort (Rate Base Impact)	Rounded
92	Jan-21	(101,642.95)	5,285,433.52
93	Feb-21	(101,642.95)	5,183,790.57
94	Mar-21	(101,642.95)	5,082,147.62
95	Apr-21	(101,642.95)	4,980,504.67
96	May-21	(101,642.95)	4,878,861.71
97	Jun-21	(101,642.95)	4,777,218.76
98	Jul-21	(101,642.95)	4,675,575.81
99	Aug-21	(101,642.95)	4,573,932.86
100	Sep-21	(101,642.95)	4,472,289.90
101	Oct-21	(101,642.95)	4,370,646.95
102	Nov-21	(101,642.95)	4,269,004.00
103	Dec-21	(101,642.95)	4,167,361.05
104	Jan-22	(101,642.95)	4,065,718.09
105	Feb-22	(101,642.95)	3,964,075.14
106	Mar-22	(101,642.95)	3,862,432.19
107	Apr-22	(101,642.95)	3,760,789.24
108	May-22	(101,642.95)	3,659,146.29
109	Jun-22	(101,642.95)	3,557,503.33
110	Jul-22	(101,642.95)	3,455,860.38
111	Aug-22	(101,642.95)	3,354,217.43
112	Sep-22	(101,642.95)	3,252,574.48
113	Oct-22	(101,642.95)	3,150,931.52
114	Nov-22	(101,642.95)	3,049,288.57
115	Dec-22	(101,642.95)	2,947,645.62
116	Jan-23	(101,642.95)	2,846,002.67
117	Feb-23	(101,642.95)	2,744,359.71
118	Mar-23	(101,642.95)	2,642,716.76
119	Apr-23	(101,642.95)	2,541,073.81
120	May-23	(101,642.95)	2,439,430.86
121	Jun-23	(101,642.95)	2,337,787.90
122	Jul-23	(101,642.95)	2,236,144.95
123	Aug-23	(101,642.95)	2,134,502.00
124	Sep-23	(101,642.95)	2,032,859.05
125	Oct-23	(101,642.95)	1,931,216.09
126	Nov-23	(101,642.95)	1,829,573.14
127	Dec-23	(101,642.95)	1,727,930.19
128	Jan-24	(101,642.95)	1,626,287.24
129	Feb-24	(101,642.95)	1,524,644.29
130	Mar-24	(101,642.95)	1,423,001.33
131	Apr-24	(101,642.95)	1,321,358.38
132	May-24	(101,642.95)	1,219,715.43
133	Jun-24	(101,642.95)	1,118,072.48
134	Jul-24	(101,642.95)	1,016,429.52
135	Aug-24	(101,642.95)	914,786.57
136	Sep-24	(101,642.95)	813,143.62
137	Oct-24	(101,642.95)	711,500.67
138	Nov-24	(101,642.95)	609,857.71
139	Dec-24	(101,642.95)	508,214.76
140	Jan-25	(101,642.95)	406,571.81
141	Feb-25	(101,642.95)	304,928.86
142	Mar-25	(101,642.95)	203,285.90
143	Apr-25	(101,642.95)	101,642.95
144	May-25	(101,642.95)	0.00

Hawaiian Electric Company, Inc.  
Revenue Decoupling - Rate Base RAM  
2016 Major Projects and Other Plant Additions

Grand Parent	Project #	Project	Plant Addition Date	NET CALCULATION				GROSS CALCULATION						
				Net Plant Adds Thru 12/31/15 (N)	Total Project Cost (B)	2016 Plant Additions		Net Plant Adds Thru 12/31/16 (H) = (E) + (D)	Over/(Under) NET PUC Approved (I) = (F) - (G)	Project to Date Recorded CIAC (G)	Gross Plant Adds 12/31/16 (H) = (E) - (G)	Gross PUC Approved (J) = (G) - (I)	Over/(Under) GROSS PUC Approved (J) = (G) - (I)	
						CIAC & Adjustments (C)	Cost (D) = (B) + (C)							
2016 Major Projects														
1	-	P0001370	DOT Airport DSG	2016 straggling	3,069,526	172,652	-	172,652	3,242,178	3,400,000	[3a]	(157,822)	(157,822)	Production Other
2	Y485000	Various	EOTF Phase 2	2016 straggling	9,808,422	682	(718)	(36)	9,808,386	10,059,000	[3b]	(250,614)	(250,614)	Distribution
3	-	P0002264	Pukele 80MVA Tsf #1	2016/02	-	3,839,121	-	3,839,121	3,839,121	4,164,051	[3c]	(324,930)	(324,930)	Transmission
Other Projects with costs above the PUC Approved														
1	Y001138	Various	Kahuku Wind Power		2,132,812	-	-	-	2,132,812	2,125,651	[1]	7,161	7,161	Various
2	-	P0001399	W8 Main Transformer Replace		2,600,439	-	-	-	2,600,439	2,357,425	[1]	243,014	243,014	Production Steam
3	-	P7650000	W8 Boiler Controls Upgrade		6,310,672	-	-	-	6,310,672	5,236,138	[1]	1,074,534	1,074,534	Production Steam
4	-	P7590000	W7 Controls Upgrade		5,445,577	-	-	-	5,445,577	5,021,440	[1]	424,137	424,137	Production Steam
5	Y00038	P0000783	Kakaako Makai-Hiwa 25KV DL		7,643,799	-	-	-	7,643,799	3,627,507	[3d]	4,016,292	4,016,292	Distribution
6	Y00038	P0000672	Kakaako Makai-Kewalo 25KV DL	2016 straggling	5,423,740	111	-	111	5,423,851	4,013,624	[3d]	1,410,227	1,410,227	Distribution
7	Y00038	P0001579	Kakaako Makai DOT Queen-Cook	2016 straggling	2,380,416	2,890,742	(2,825,023)	65,719	2,446,135	1,170,090	[a]	1,276,045	1,276,045	Distribution
-	P00009000	8PT Tank 133 Improvements			7,188,095	-	-	-	7,188,095	6,995,582	[1]	192,513	192,513	Production Steam

[1] Transmittal No. 16-01 (Decoupling) - Hawaiian Electric Company RBA Rate Adjustment, HECO-WP-D2-001, filed on March 31, 2016.

[2] Hawaiian Electric Companies' Exemption From and Modification of General Order No. 7 Paragraph No. 2.1(g), Relating to Capital Improvements Capital Projects Completed in 2016, in Docket No. 03-0257, filed on March 30, 2017. See HECO-WP-D2-002.

[3] Per the Final Decision & Order and Dissenting Opinion of Leslie H. Kanda, Commissioner, filed on August 31, 2010, in Docket No. 2008-0274, on page 54, "for purposes of calculating the Rate Base for the RAM, the costs on Major Capital Projects shall be limited to those amounts most recently approved, e.g., when authorized in the commission's decision approving the HECO Companies' application in compliance with General Order No. 7 or in an interim or final decision and order issued by the commission in the HECO companies' rate cases."

[3a] Decision and Order, p. 38, Docket No. 2008-0229, For Approval to Commit Funds in Excess of \$2,500,000 (excluding customer contributions) for Item P0001370, DOT Airport DSG, filed June 25, 2009.

[3b] Decision and Order, p. 8, Docket No. 2010-0062, For Approval to Modify Phase 2 of the East Oahu Transmission Project, filed October 19, 2010.

[3c] Decision and Order, p. 22, Docket No. 2011-0156, For Approval to Commit Funds in Excess of \$2,500,000 (excluding customer contributions) for Item Y00038, DOT Underground Request, and Kakaako Makai-Hiwa 25KV DL, filed October 12, 2012. Actual total for Item P0002264, Pukele Tsf #1 80MVA per Hawaiian Electric Application, Exhibit VI Page 1 of 7, filed July 13, 2011.

[3d] Letter From: D. Endo-Omoto; Exhibit IX Page 2 of 5, To: Commission; Re: Docket No. 2009-0047, DOT Underground Request/Kakaako Makai 25 kV Circuits; Revised Estimate of Cost Savings, dated June 12, 2009. The PUC approved net project cost of \$1,170,090 for P0001579 was determined by taking the total gross plant additions qualifying for RB RAM is the sum of the PUC approved net project cost of \$1,170,090 + \$2,825,023 = \$4,015,113. See table below. The gross amount over the PUC approved in column J of \$1,276,045 was determined by taking the total gross plant addition of \$5,271,158, less the gross amount qualifying for RB RAM of \$3,995,113. Total grandparent cost approved in Decision and Order, p. 9, Docket No. 2009-0047, For Approval to Commit Funds in Excess of \$2,500,000 (excluding customer contributions) for Item Y00038, DOT Underground Request, and Kakaako Makai-Hiwa 25KV DL, and of a Waiver of Rule 13 of Hawaiian Electric's Tariff to Allow Hawaiian Electric to Pay for a Portion of the Underground Conversion Cost for Item P0001579, DOT Underground Request, filed August 7, 2009.

[4] Letter From: D. Endo-Omoto; Exhibit IX Page 2 of 5, To: Commission; Re: Docket No. 2009-0047, DOT Underground Request/Kakaako Makai 25 kV Circuits; Revised Estimate of Cost Savings, dated June 12, 2009. The PUC approved net project cost of \$1,170,090 for P0001579 was determined by taking the total gross plant additions qualifying for RB RAM is the sum of the PUC approved net project cost of \$1,170,090 + \$2,825,023 = \$4,015,113. See table below. The gross amount over the PUC approved in column J of \$1,276,045 was determined by taking the total gross plant addition of \$5,271,158, less the gross amount qualifying for RB RAM of \$3,995,113. Total grandparent cost approved in Decision and Order, p. 9, Docket No. 2009-0047, For Approval to Commit Funds in Excess of \$2,500,000 (excluding customer contributions) for Item Y00038, DOT Underground Request, and Kakaako Makai-Hiwa 25KV DL, and of a Waiver of Rule 13 of Hawaiian Electric's Tariff to Allow Hawaiian Electric to Pay for a Portion of the Underground Conversion Cost for Item P0001579, DOT Underground Request, filed August 7, 2009.

P0001579 - D&O vs current estimate:	Gross PUC App'd				Estimated	
	D&O	Thru 12/31/16	Difference	2017 CIAC	Thru 12/31/17	Difference
Gross Plant Additions Qualifying for RB RAM	4,160,050	3,995,113	(164,937)	-	4,895,113	735,063
Less: CIAC (Cash and In-Kind)	(2,989,960)	(2,825,023)	164,937	(900,000)	(3,725,023)	(735,063)
PUC Approved Net Plant Additions	1,170,090	1,170,090	-	(900,000)	1,170,090	-

## 2016 General Order No. 7 (GO7) Report Summary Plant Additions

<b>Projects</b>	<b>2016 Plant Addition (1)</b>
Less than \$2.5M	234,391,261
Greater than \$2.5M	6,903,308
<b>Total Plant Additions</b>	<b>241,294,569</b>
<b>Less: Major Project additions in 2016</b>	
DOT Airport DSG	(172,652)
Pukele 80MVA Tsf #1	(3,839,121)
Kakaako Makai-Kewalo	(111)
Kakaako Makai DOT Queen-Cook	(2,890,742)
EOTP Phase 2	(682)
	<b>(6,903,308)</b>
<b>Baseline Plant Additions</b>	<b>234,391,261</b>

(1) Source: Hawaiian Electric Companies' Exemption From and Modification General Order No. 7 Paragraph No. 2.3(g), Relating to Capital Improvements Capital Projects Completed in 2016, in Docket No. 03-0257 filed on March 30, 2017.

Hawaiian Electric Company  
2017 Plant Additions - Major Projects Support

Grand- parent	Project	Functional Category	Plant Addition Date	PUC Approved, net [1]	CIAC Received/ Estimated	Gross PUC Approved	Gross Plant Additions 12/31/16	2017 Gross Plant Additions [3]	Estimated Gross Plant Additions 12/31/17 $F = D + E$	Over/(Under) PUC Approved $G = F - C$	2017 Plant Addition Qualifying for RB RAM (Note A)	Future Years [3]
-	P0002264: Pukele 80MVA Tsf #1	Transmission	2016/02	4,164,051 [1a]	-	4,164,051	3,839,121	7,418	3,846,539	(317,512)	7,418	-
-	P0001370: DOT Airport DSG	Production Other	2014/08	3,400,000 [1b]	(1,993,000) [1b]	5,393,000 [1b]	5,235,178	138,537	5,373,715	(19,285) [1b]	138,537	-
Y00168	P0003205: ERP EAM Hardware	Computers	2017/08	2,590,000 [1c]	-	2,590,000	-	2,598,766	2,598,766	8,766	2,590,000	-
											<u>2,735,955</u>	

NOTE A: Amount qualifying for 2017 rate base RAM recovery is limited to the lower of the 2017 gross plant addition (column E) or the PUC approved amount (column C). In the case of straggling costs, the amount qualifying for 2017 rate base RAM recovery is limited to the lower of the 2017 gross plant addition (column E) or the remaining unused balance of the PUC approved amount.

[1] Per the Final Decision & Order and Dissenting Opinion of Leslie H. Kondo, Commissioner, filed on August 31, 2010, in Docket No. 2008-0274, on page 54, "for purposes of calculating the Rate Base for the RAM, the costs on Major Capital Projects shall be limited to those amounts most recently approved, e.g., when authorized in the commission's decision approving the HECO Companies' application in compliance with General Order No. 7 or in an interim or final decision and order issued by the commission in the HECO companies' rate cases."

[1a] Decision and Order No. 30689, p. 22, Docket No. 2011-0156, For Approval to Commit Funds in Excess of \$2,500,000 (excluding customer contributions) for Item P0001494, Pukele Tsf #3 80MVA; Item P0001492, Pukele Tsf #2 80MVA; and Item 0002264, Pukele Tsf #1 80MVA, filed October 12, 2012. Actual total for Item P0002264, Pukele Tsf #1 80MVA per Hawaiian Electric Application, Exhibit VI Page 1 of 7, filed July 13, 2011.

[1b] Decision and Order, p. 38, Docket No. 2008-0329, For Waiver of the Airport Dispatchable Standby Generation Project from the Competitive Bidding Framework, Approval of a Dispatchable Standby Generation Agreement with the State of Hawaii, Department of Transportation, Approval of the Dispatchable Standby Generation Project Cost Accounting, Approval to Include the Project Fuel Costs in Hawaiian Electric Company, Inc.'s Energy Cost Adjustment Clause, and Approval to Commit Funds in Excess of \$2,500,000, filed June 25, 2009.

The PUC approved amount of \$3,400,000 is net of contributions. Gross plant additions of \$5,373,715 net of \$1,993,000 contributions received in 2011 is \$3,380,715 and is \$19,285 less than the PUC approved amount of \$3.4M net of CIAC. Therefore, the total estimated 2017 gross plant additions of \$138,537 qualify for inclusion in the rate base RAM calculation.

[1c] Per Decision and Order No. 33861, p. 4, Docket No. 2014-0170, For Approval of an Enterprise Resource Planning and Enterprise Asset Management System Implementation Project and Related Accounting Treatment, filed August 11, 2016.

[2] Source: HECO-WP-D2-001.

[3] Source: UPlanner Budget files. Forecast as of February 15, 2017.

HAWAIIAN ELECTRIC CO., INC.				HECO-WP-D4-001
DEFERRED INCOME TAXES				
		DR / (CR)	DR / (CR)	DR / (CR)
		HECO	HECO	HECO
		FEDERAL	STATE	TOTAL
DR / (CR)		LIABILITY	LIABILITY	LIABILITY
LIAB	DESCRIPTION	12/31/2016	12/31/2016	12/31/2016
28311	Unearned Lease	641.68	-	641.68
28312	Accrued Vacation	(326,161.00)	(65,811.84)	(391,972.84)
28313	Uncollectible Acct	1,397,623.72	255,563.46	1,653,187.18
28314	Directors Def Comp	13,529.57	1,571.96	15,101.53
28317	Discounted Work Comp	348,193.39	63,922.41	412,115.80
28319	Cap to Construct (Cost of Removal)	(84,786,413.04)	(15,513,869.48)	(100,300,282.52)
28321	Pension	(6,385,290.67)	(1,167,597.90)	(7,552,888.57)
28323	Excess Benefit Plan	858,587.18	152,471.09	1,011,058.27
28326	Def Exec Comp (Def EICP&LTIP)	63,196.62	11,557.02	74,753.64
28327	Software (no APPRISE & e business)	52,414.78	43,701.75	96,116.53
28328	G/L ACRS Retirements	(18,851,811.05)	(3,713,432.92)	(22,565,243.97)
28330	EICP	493,196.49	74,013.70	567,210.19
28331	CIAC	30,352,581.07	9,358,082.71	39,710,663.78
28332	Customer Advances	971,253.10	176,937.27	1,148,190.37
28333	Capitalized Interest	13,243,642.83	3,370,493.19	16,614,136.02
28335	Connection Fees	(16,019.85)	(8,444.14)	(24,463.99)
28336	Nondeductible Interest	31,693.77	5,795.04	37,488.81
28337	Supplemt Benefits - SERP	519,029.19	84,623.71	603,652.90
28338	Nondeductible Vac	-	-	-
28340	LTIP	700,186.73	128,033.97	828,220.70
28341	Waipahu Baseyard Int	111,861.55	20,452.91	132,314.46
28347	Waiau Water Well Pmts	175,670.24	32,138.42	207,808.66
28348	Nonutil Bad Debt	-	-	-
28350	Outage Loss Adj Exp	-	(24,509.00)	(24,509.00)
28401	Genl/Auto (& Accidents)	1,102,720.92	201,640.01	1,304,360.93
28403	CWIP Debt Transition	(306,549.65)	(56,057.07)	(362,606.72)
28404	CWIP Equity Trans	(921,270.05)	(168,461.68)	(1,089,731.73)
28405	Iolani Ct Plaza Sale	57,730.65	(550.76)	57,179.89
28406	Kaonohi Sale	(37,751.68)	(6,942.61)	(44,694.29)
28407	FAS 109 Flow Through	(151,097.04)	(27,585.49)	(178,682.53)
28408	Plant Transition	(9,273,825.46)	(1,695,819.07)	(10,969,644.53)
28409	CWIP Equity Net	(30,215,631.54)	(5,525,124.69)	(35,740,756.23)
28410	CWIP Equity Grossup	(19,244,120.65)	(3,518,911.68)	(22,763,032.33)
28411	CWIP Debt	(13,692,846.72)	(2,507,366.75)	(16,200,213.47)
28412	Genl/Auto Liability - Legal	59,013.40	8,362.09	67,375.49
28413	Post Retirement Ben	(335,719.03)	(41,423.38)	(377,142.41)
28414	Reg Liab Federal ITC	397,941.07	73,604.61	471,545.68
28418	IRP Costs	(109,109.22)	(20,152.04)	(129,261.26)
28419	Reg Liab Excess 283	268,348.43	49,709.54	318,057.97
28422	Miscellaneous	28,511.61	(16,969.99)	11,541.62
28427	Prepaid Expenses	(860,226.32)	(157,297.40)	(1,017,523.72)
28430	FMB X Premium	0.48	(1.24)	(0.76)
28432	Coal Gasif Costs	-	(11,273.00)	(11,273.00)
28434	EEO Claims	10,225.32	1,869.79	12,095.11
28435	Rev Bond Differential	(300,607.40)	(54,967.74)	(355,575.14)
28436	TIP/Rewards Programs	341,486.63	62,703.33	404,189.96
28437	HACOA	-	(1,533.00)	(1,533.00)
28438	BONY Rev	-	(148.00)	(148.00)
28439	GAQS Tel	-	(255.00)	(255.00)
28440	Kalaeloa	-	-	-
28441	Sun Power	0.02	-	0.02
28442	Overhaul (Waiau 3 Turbine)	5,678.74	1,038.94	6,717.68
28512	Revenue Bond Cost Amort.	(1,368,909.92)	(250,314.06)	(1,619,223.98)
28514	Software (APPRISE only)	-	(50,607.54)	(50,607.54)
28516	Honolulu Harbor Reserve	1,396,496.59	283,416.94	1,679,913.53
28520	Deferred Comp - restricted stock	184,535.98	33,743.23	218,279.21
28522	Perry reserve	-	-	-
28526	Emissions Fees	582,855.83	106,579.47	689,435.30
28528	Substation land - Kulioouou	-	-	-
28530	AES Hawaii PPA	64,753.26	11,840.79	76,594.05
28532	CIS Project	(836,542.41)	(152,360.78)	(988,903.19)
28538	Rate Case Costs	(66,886.21)	(12,230.99)	(79,117.20)
28540	Kalaeloa PPA	(607.16)	(111.30)	(718.46)
28542	QUIPS amortization	(285,870.68)	(52,273.84)	(338,144.52)
28544	OPEB Exec Life	4,163,584.25	761,409.20	4,924,993.45
28546	Percentage Repairs Allowance	(3,456,638.42)	(770,103.95)	(4,226,742.37)
28548	Cap interest (D&T)	(3,954,311.20)	(1,011,957.46)	(4,966,268.66)
28550	E-Business hardware	(32,884.47)	(8,206.93)	(41,091.40)
28552	OMS project costs	320,513.20	59,908.21	380,421.41
28556	Substation Land - Waianae	-	-	-

HAWAIIAN ELECTRIC CO., INC.		HECO-WP-D4-001		
DEFERRED INCOME TAXES				
		DR / (CR)	DR / (CR)	DR / (CR)
		HECO	HECO	HECO
		FEDERAL	STATE	TOTAL
DR / (CR)		LIABILITY	LIABILITY	LIABILITY
LIAB	DESCRIPTION	12/31/2016	12/31/2016	12/31/2016
28558	Substation Land - Aiea	-	(2,073.65)	(2,073.65)
28560	Solar tax credit	1,050.66	192.12	1,242.78
28564	HR Suites project costs	(674,302.12)	(125,549.41)	(799,851.53)
28568	Solar Saver Program	159,923.57	29,242.91	189,166.48
28570	Pension Tracker	(32,111,795.50)	(5,871,857.96)	(37,983,653.46)
28572	OPEB Tracker	1,188,902.01	217,397.72	1,406,299.73
28574	Substation Land - Barber's Pt	-	-	-
28576	Substation Land - Haiku	-	-	-
28580	Blue Earth reserve	(1,961.18)	(358.58)	(2,319.76)
28584	RO Water Pipeline	283,232.14	51,790.89	335,023.03
28586	Big Wind costs	346,291.26	63,322.58	409,613.84
28590	Repairs Adjustment	(44,597,972.44)	(15,480,842.27)	(60,078,814.71)
28592	Stimulus Funds	(48,882.89)	(8,938.57)	(57,821.46)
28594	Budget System Replacement	(321,379.44)	(58,766.00)	(380,145.44)
28596	EOTP interest / amort	(111,452.63)	(20,380.18)	(131,832.81)
28598	CIP interest	(561,859.94)	(102,739.40)	(664,599.34)
28600	ERP project costs	92,291.68	16,876.21	109,167.89
28602	Reg Liab Federal PV/EV	421,184.22	77,015.93	498,200.15
28604	IVR project costs	(350,442.29)	(60,586.71)	(411,029.00)
28606	NOL	3,257,752.00	-	3,257,752.00
28608	Franchise Tax	1,991,789.54	364,212.25	2,356,001.79
28612	CIS interest	-	-	-
28614	RBA revenues	(14,219,227.64)	(2,600,087.23)	(16,819,314.87)
28616	RAM revenues	(5,954,099.72)	(1,088,749.89)	(7,042,849.61)
28618	NOL - charitable	(10,578.93)	2,666.00	(7,912.93)
28620	G/L Lauula	27,524.87	2,564.05	30,088.92
28622	NOL - credits	290,372.00	-	290,372.00
28624	AMT	937,000.00	-	937,000.00
AOCINQ	AOCI - NQ Pension	895,115.53	163,672.31	1,058,787.84
AOCIOPEB	AOCI - OPEB Exec Life	(857,419.32)	(156,787.19)	(1,014,206.51)
AOCIFX	AOCI - FX Unrealize	244,305.15	44,672.99	288,978.14
48000	FIN 48 tax	-	672,133.00	672,133.00
48002	FIN 48 interest	31,410.53	5,743.64	37,154.17
50000	Rounding	(103.53)	(213.97)	(317.50)
FED ACCOUNT 283, excluding state ITC		(227,152,734.96)	(45,043,916.37)	(272,196,651.33)
28310	State ITC	18,578,038.64	3,379,716.96	21,957,755.60
TOTAL ACCOUNT 283		(208,574,696.32)	(41,664,199.41)	(250,238,895.73)
28210000	Accelerated Depreciation	(265,005,979.93)	(12,218,306.60)	(277,224,286.53)
28210100	Accel. Depr. - Excess	-	-	-
28210200	Accel. Depr. - Deficit	(392,363.93)	(71,331.81)	(463,695.74)
TOTAL ACCOUNT 282		(265,398,343.86)	(12,289,638.41)	(277,687,982.27)
TOTAL DEF INCOME TAX - UTILITY		(473,973,040.18)	(53,953,837.82)	(527,926,878.00)
28210300	Nonutility Depreciation	1,147,751.62	307,951.04	1,455,702.66
28301001	Nonutility - Other	1,720,362.30	317,147.58	2,037,509.88
28301002	RHI Tax Allocation	-	-	-
28301003	UBC Tax Allocation	-	-	-
50001	Rounding	(1.73)	-	(1.73)
TOTAL DEF INCOME TAX - NONUTILITY		2,868,112.19	625,098.62	3,493,210.81
TOTAL DEF INCOME TAX		(471,104,927.99)	(53,328,739.20)	(524,433,667.19)
RATE BASE CALCULATION				
TOTAL ACCOUNT 283		(208,574,696.32)	(41,664,199.41)	(250,238,895.73)
Less:				
28312	Accrued Vacation	(326,161.00)	(65,811.84)	(391,972.84)
28313	Uncollectible Acct	1,397,623.72	255,563.46	1,653,187.18
28314	Directors Def Comp	13,529.57	1,571.96	15,101.53
28317	Discounted Work Comp	348,193.39	63,922.41	412,115.80
28323	Excess Benefit Plan	858,587.18	152,471.09	1,011,058.27
28326	Def Exec Comp (Def EICP&LTIP)	63,196.62	11,557.02	74,753.64
28330	EICP	493,196.49	74,013.70	567,210.19



HAWAIIAN ELECTRIC CO., INC.				HECO-WP-D4-001	
DEFERRED INCOME TAXES					
		DR / (CR)	DR / (CR)	DR / (CR)	
		HECO	HECO	HECO	
		FEDERAL	STATE	TOTAL	
DR / (CR)		LIABILITY	LIABILITY	LIABILITY	
LIAB	DESCRIPTION	12/31/2016	12/31/2016	12/31/2016	
28336	Nondeductible Interest	31,693.77	5,795.04	37,488.81	
28337	Supplemt Benefits - SERP	519,029.19	84,623.71	603,652.90	
28338	Nondeductible Vac	-	-	-	
28340	LTIP	700,186.73	128,033.97	828,220.70	
28341	Waipahu Baseyard Int	111,861.55	20,452.91	132,314.46	
28347	Waiau Water Well Pmts	175,670.24	32,138.42	207,808.66	
28348	Nonutil Bad Debt	-	-	-	
28350	Outage Loss Adj Exp	-	(24,509.00)	(24,509.00)	
28401	Genl/Auto (& Accidents)	1,102,720.92	201,640.01	1,304,360.93	
28412	Genl/Auto Liability - Legal	59,013.40	8,362.09	67,375.49	
28418	IRP Costs	(109,109.22)	(20,152.04)	(129,261.26)	
28434	EEO Claims	10,225.32	1,869.79	12,095.11	
28436	TIP/Rewards Programs	341,486.63	62,703.33	404,189.96	
28516	Honolulu Harbor Reserve	1,396,496.59	283,416.94	1,679,913.53	
28520	Deferred Comp - restricted stock	184,535.98	33,743.23	218,279.21	
28522	Perry reserve	-	-	-	
28538	Rate Case Costs	(66,886.21)	(12,230.99)	(79,117.20)	
28544	OPEB Exec Life	4,163,584.25	761,409.20	4,924,993.45	
28550	E-Business hardware	(32,884.47)	(8,206.93)	(41,091.40)	
28580	Blue Earth reserve	(1,961.18)	(358.58)	(2,319.76)	
28586	Big Wind costs	346,291.26	63,322.58	409,613.84	
28600	ERP project costs	92,291.68	16,876.21	109,167.89	
28606	NOL	3,257,752.00	-	3,257,752.00	HECO-WP-D4-004
28608	Franchise Tax	1,991,789.54	364,212.25	2,356,001.79	
28614	RBA revenues	(14,219,227.64)	(2,600,087.23)	(16,819,314.87)	
28616	RAM revenues	(5,954,099.72)	(1,088,749.89)	(7,042,849.61)	
28618	NOL - charitable	(10,578.93)	2,666.00	(7,912.93)	HECO-WP-D4-004
28622	NOL - credits	290,372.00	-	290,372.00	HECO-WP-D4-004
28624	AMT	937,000.00	-	937,000.00	
AOCINQ	AOCI - NQ Pension	895,115.53	163,672.31	1,058,787.84	
AOCIOPEB	AOCI - OPEB Exec Life	(857,419.32)	(156,787.19)	(1,014,206.51)	
AOCIFX	AOCI - FX Unrealize	244,305.15	44,672.99	288,978.14	
48000	FIN 48 tax	-	672,133.00	672,133.00	
48002	FIN 48 interest	31,410.53	5,743.64	37,154.17	
	Adjustment for Chapin Lane CIAC	203,441.88	38,035.54	241,477.42	
	Adjustment for EOTP, CIS and CIP	(395,249.00)	(72,275.00)	(467,524.00)	HECO-WP-D4-003
Total Exclusions		(1,712,975.58)	(494,545.89)	(2,207,521.47)	
Total 283 Deferred Taxes for Rate Base		(206,861,720.74)	(41,169,653.52)	(248,031,374.26)	To Schedule D4
Total 282 Deferred Taxes for Rate Base		(265,398,343.86)	(12,289,638.41)	(277,687,982.27)	To Schedule D4
TOTAL DEF INCOME TAX - RATE BASE		(472,260,064.60)	(53,459,291.93)	(525,719,356.53)	To Schedule D4
NOTE A> Per the CA's 2013 Transmittal No. 13-01, page 12, the Consumer Advocate proposed removal of the DTA on the NOL carryforward. Hawaiian Electric rejected the CA's proposal but recognizing the need for a quick resolution of the 2013 decoupling proceeding and the precedential nature of this ADIT item, an adjustment to increase ADIT was made. For the current decoupling proceeding, Hawaiian Electric has adjusted ADIT for an amount consistent with the prior decoupling filing in arriving at Other Deferred Income Taxes. Again, the adjustment is a general concession to the ADIT balance and Hawaiian Electric has not conceded to the CA's position.					

[illegible]

**HAWAIIAN ELECTRIC CO., INC.**  
**EXCESS TAX DEPRECIATION**  
**W8 BOILER**

Project No.	D/S	Description	Total Basis	Less PUC Approved Amt	Disallowed Costs	Plant Acct Life Bonus	2011	2012	2013	2014	2015	2016
<b>FEDERAL</b>												
P7650000	8/23/2011	W8 Boiler Controls Upgrade	6,165,261	5,236,138	929,123	Steam	20	50	31,019	28,696	26,540	24,552
	v2012	W8 Boiler Controls Upgrade	118,460	-	118,460	Steam	20	50	4,276	3,955	3,659	3,384
	v2013	W8 Boiler Controls Upgrade	45,384	-	45,384	Steam	20	50	23,543	1,638	1,515	1,402
	v2014	W8 Boiler Controls Upgrade	(18,503)	-	(18,503)	Steam	20	50	(9,598)	(668)	(618)	(618)
	v2015	W8 Boiler Controls Upgrade	70	-	70	Steam	20	50		36	3	3
Total			6,310,672	5,236,138	1,074,534		481,983	94,988	58,838	24,691	31,082	28,723
Cumulative							481,983	576,971	635,809	660,500	691,582	720,305
HECO-WP-D4-002, page 1												
<b>HAWAII</b>												
P7650000	8/23/2011	W8 Boiler Controls Upgrade	6,165,261	5,236,138	929,123	Steam	20	0	62,038	57,392	53,081	49,104
	v2012	W8 Boiler Controls Upgrade	118,460	-	118,460	Steam	20	0	8,552	7,910	7,317	6,768
	v2013	W8 Boiler Controls Upgrade	45,384	-	45,384	Steam	20	0	1,702	3,276	3,030	2,803
	v2014	W8 Boiler Controls Upgrade	(18,503)	-	(18,503)	Steam	20	0	(694)	(1,336)	(1,235)	(1,235)
	v2015	W8 Boiler Controls Upgrade	70	-	70	Steam	20	0			3	5
Total			6,310,672	5,236,138	1,074,534		34,842	71,515	72,292	67,884	62,095	57,445
Cumulative							34,842	106,357	178,649	246,533	308,628	366,073
HECO-WP-D4-002, page 1												

HAWAIIAN ELECTRIC CO., INC.  
EXCESS TAX DEPRECIATION  
W7 CONTROLS UPGRADE

Project No.	DIS	Description	Total Basis	Less PUC Approved Amt	Disallowed Costs	Plant Acct Life	Bonus	2011	2012	2013	2014	2015	2016
<b>FEDERAL</b>													
P7590000	11/2/2011	W7 Controls Upgrade	5,009,888	5,021,440	(11,552)	Steam	20	(5,993)	(417)	(386)	(357)	(330)	(305)
	v2012	W7 Controls Upgrade	119,081	-	119,081	Steam	20	61,773	4,298	3,976	3,678	3,402	3,402
	v2013	W7 Controls Upgrade	308,336	-	308,336	Steam	20	159,949	11,129	10,294	9,523	9,523	9,523
	v2014	W7 Controls Upgrade	8,237	-	8,237	Steam	20	4,273	297	275	275	275	275
	v2015	W7 Controls Upgrade	35	-	35	Steam	20	18	1	1	1	1	1
Total			5,445,577	5,021,440	424,137			(5,993)	61,356	163,861	19,021	13,957	12,896
Cumulative								(5,993)	55,363	219,224	238,245	252,202	265,098
HECO-WP-D4-002, page 1													
<b>HAWAII</b>													
P7590000	11/2/2011	W7 Controls Upgrade	5,009,888	5,021,440	(11,552)	Steam	20	(433)	(834)	(771)	(714)	(660)	(611)
	v2012	W7 Controls Upgrade	119,081	-	119,081	Steam	20	4,466	8,596	7,951	7,356	6,803	6,803
	v2013	W7 Controls Upgrade	308,336	-	308,336	Steam	20	11,563	22,259	20,588	19,046	19,046	19,046
	v2014	W7 Controls Upgrade	8,237	-	8,237	Steam	20	309	595	550	550	550	550
	v2015	W7 Controls Upgrade	35	-	35	Steam	20	1	1	1	1	1	1
Total			5,445,577	5,021,440	424,137			(433)	3,632	19,388	29,805	27,880	25,791
Cumulative								(433)	3,199	22,587	52,392	80,272	106,063
HECO-WP-D4-002, page 1													

**HAWAIIAN ELECTRIC CO., INC.**  
**EXCESS TAX DEPRECIATION**  
**W8 MAIN**

Project No.	D/S	Description	Total Basis	Less PUC Approved Amt	Disallowed Costs	Plant Acct Life	Bonus	2011	2012	2013	2014	2015	2016
<b>FEDERAL</b>													
P0001399	8/-/11	W8 Main Transformer Replace	2,627,959	2,357,425	270,534	Steam	20	50	9,765	9,032	8,355	7,728	7,149
	v2012	W8 Main Transformer Replace	19,800		19,800	Steam	20	50	10,271	715	661	612	566
	v2013	W8 Main Transformer Replace	(47,320)		(47,320)	Steam	20	50		(24,547)	(1,708)	(1,580)	(1,461)
	Total		2,600,439	2,357,425	243,014				140,340	20,036	7,308	6,760	6,254
	Cumulative								140,340	160,376	152,884	159,644	165,898
<b>HAWAII</b>													
P0001399	8/-/11	W8 Main Transformer Replace	2,627,959	2,357,425	270,534	Steam	20	0	10,145	19,530	16,711	15,456	14,298
	v2012	W8 Main Transformer Replace	19,800	-	19,800	Steam	20	0		743	1,322	1,223	1,131
	v2013	W8 Main Transformer Replace	(47,320)	-	(47,320)	Steam	20	0		(1,775)	(3,416)	(3,160)	(2,923)
	Total		2,600,439	2,357,425	243,014				10,145	20,273	14,617	13,519	12,506
	Cumulative								10,145	30,418	62,753	76,272	88,778

HECO-WP-D4-002, page 1

HECO-WP-D4-002, page 1

**HAWAIIAN ELECTRIC CO., INC.  
EXCESS TAX DEPRECIATION  
KAHUKU WIND**

Project No.	DIS	Description	Total Basis	Less PUC Approved Amt	Disallowed Costs	Plant Acct Life	Bonus	2011	2012	2013	2014	2015	2016
<b>FEDERAL</b>													
Y00138	12/-/10	Kahuku Wind Power Interconnect	2,225,842	2,125,651	100,191	Various	20	50	51,974	3,616	3,345	3,094	2,862
	v2012	Kahuku Wind Power Interconnect	(93,030)		(93,030)	Various	20	50	(48,259)	(3,358)	(3,106)	(2,873)	(2,657)
		Total	2,132,812	2,125,651	7,161				51,974	(44,643)	(13)	(12)	(11)
		Cumulative							51,974	7,331	7,318	7,306	7,295
													7,286
<b>HAWAII</b>													
Y00138	12/-/10	Kahuku Wind Power Interconnect	2,225,842	2,125,651	100,191	Various	20	0	3,757	7,233	6,690	6,189	5,724
	v2012	Kahuku Wind Power Interconnect	(93,030)	-	(93,030)	Various	20	0	(3,489)	(6,716)	(6,212)	(5,746)	(5,315)
		Total	2,132,812	2,125,651	7,161				3,757	3,744	(26)	(23)	(22)
		Cumulative							3,757	7,501	7,475	7,452	7,430
													7,410

HECO-WP-D4-002, page 1

HECO-WP-D4-002, page 1

**HAWAIIAN ELECTRIC CO., INC.  
EXCESS TAX DEPRECIATION  
KAKAAKO MAKAI-IWILEI 25Kv DL**

Project No.	DIS	Description	Total Basis	Less PUC Approved Amt	Disallowed Costs	Plant Acct Life	Bonus	2013	2014	2015	2016
<b>FEDERAL</b>											
P0000783	7/-13	Kakaako Makai-Iwilei 25Kv DL	6,661,331	3,627,507	3,033,824	Distr	20	1,573,796	109,506	101,284	93,700
	v2014	Kakaako Makai-Iwilei 25Kv DL	485,650		485,650	Distr	20		251,931	17,530	16,213
	v2015	Kakaako Makai-Iwilei 25Kv DL	496,818		496,818	Distr	20			257,724	17,933
		<b>Total</b>	<b>7,643,799</b>	<b>3,627,507</b>	<b>4,016,292</b>			<b>1,573,796</b>	<b>361,437</b>	<b>376,538</b>	<b>127,846</b>
		<b>Cumulative</b>						<b>1,573,796</b>	<b>1,935,233</b>	<b>2,311,771</b>	<b>2,439,617</b>
<b>HAWAII</b>											
P0000783	7/-13	Kakaako Makai-Iwilei 25Kv DL	6,661,331	3,627,507	3,033,824	Distr	20	113,768	219,012	202,568	187,399
	v2014	Kakaako Makai-Iwilei 25Kv DL	485,650		485,650	Distr	20		18,212	35,059	32,427
	v2015	Kakaako Makai-Iwilei 25Kv DL	496,818		496,818	Distr	20			18,631	35,865
		<b>Total</b>	<b>7,643,799</b>	<b>3,627,507</b>	<b>4,016,292</b>			<b>113,768</b>	<b>237,224</b>	<b>256,258</b>	<b>255,691</b>
		<b>Cumulative</b>						<b>113,768</b>	<b>350,992</b>	<b>607,250</b>	<b>862,941</b>

HECO-WP-D4-002, page 1

HECO-WP-D4-002, page 1

**HAWAIIAN ELECTRIC CO., INC.  
EXCESS TAX DEPRECIATION  
KAKAAKO MAKAI-KEWALO 25Kv DL**

Project No.	DIS	Description	Total Basis	Less PUC Approved Amt	Disallowed Costs	Plant Acct	Life	Bonus	2014	2015	2016
<b>FEDERAL</b>											
P0000672	v2014	Kakaako Makai-Kewalo 25Kv DL	4,958,840	4,013,624	945,216	Distr	20	50	490,331	34,118	31,556
	v2015	Kakaako Makai-Kewalo 25Kv DL	464,900		464,900	Distr	20	50		241,167	16,781
	v2016	Kakaako Makai-Kewalo 25Kv DL	111		111						58
	Total		5,423,851	4,013,624	1,410,227				490,331	275,285	48,395
	Cumulative								490,331	765,616	814,011
HECO-WP-D4-002, page 1											
<b>HAWAII</b>											
P0000672	v2014	Kakaako Makai-Kewalo 25Kv DL	4,958,840	4,013,624	945,216	Distr	20	0	35,446	68,235	63,112
	v2015	Kakaako Makai-Kewalo 25Kv DL	464,900		464,900	Distr	20	0		17,434	33,561
	v2016	Kakaako Makai-Kewalo 25Kv DL	111		111						4
	Total		5,423,851	4,013,624	1,410,227				35,446	85,669	96,677
	Cumulative								35,446	121,115	217,792
HECO-WP-D4-002, page 1											



**HAWAIIAN ELECTRIC CO., INC.  
EXCESS TAX DEPRECIATION  
KAKAAKO MAKAI DOT QUEEN-COOKE**

Project No.	D/S	Description	Total Basis	Less PUC Approved Amt	Disallowed Costs	Plant Acct	Life	Bonus	2014	2015	2016
<b>FEDERAL</b>											
P0001579	v2014	Kakaako Makai DOT Queen-Cooke	1,961,600	1,170,090	791,510	Distr	20	50	410,596	28,570	26,425
	v2015	Kakaako Makai DOT Queen-Cooke	418,816		418,816	Distr	20	50		217,261	15,117
	v2016	Kakaako Makai DOT Queen-Cooke	2,890,742	2,825,023	65,719	Distr	20	50			34,092
	Total		5,271,158	3,995,113	1,276,045				410,596	245,831	75,634
	Cumulative								410,596	656,427	732,061
<b>HAWAII</b>											
P0000672	v2014	Kakaako Makai DOT Queen-Cooke	1,961,600	1,170,090	791,510	Distr	20	0	29,682	57,139	52,849
	v2015	Kakaako Makai DOT Queen-Cooke	418,816		418,816	Distr	20	0		15,706	30,234
	v2016	Kakaako Makai DOT Queen-Cooke	2,890,742	2,825,023	65,719	Distr	20	50			2,464
	Total		5,271,158	3,995,113	1,276,045				29,682	72,845	85,547
	Cumulative								29,682	102,527	188,074

HECO-WP-D4-002, page 1

HECO-WP-D4-002, page 1

**HAWAIIAN ELECTRIC CO., INC.  
EXCESS TAX DEPRECIATION  
BPT TANK 133 IMPROVEMENTS**

Project No.	DJS	Description	Total Basis	Less PUC Approved Amt	Disallowed Costs	Plant Acct	Life	Bonus	2015	2016
<b>FEDERAL</b>										
P0000900	v2015	BPT Tank 133 Improvements	7,188,095	6,995,582	192,513	Steam	20	50	99,866	6,949
		Total	7,188,095	6,995,582	192,513				99,866	6,949
		Cumulative							99,866	106,815
<b>HAWAII</b>										
P0000900	v2015	BPT Tank 133 Improvements	7,188,095	6,995,582	192,513	Steam	20	0	7,219	13,898
		Total	7,188,095	6,995,582	192,513				7,219	13,898
		Cumulative							7,219	21,117

HECO-WP-D4-002, page 1

HECO-WP-D4-002, page 1

HAWAIIAN ELECTRIC CO., INC.  
ADJUSTMENT TO RATE BASE FOR REG ASSET ON EOTP, CIP, CIS

	+ = addback - = deduct						DR / (CR)	DR / (CR)	DR / (CR)	
	2011 Add'l Debt	2012 Add'l Debt	2013 Add'l Debt	2014 Add'l Debt	2015 Add'l Debt	2016 Add'l Debt	Cumulative Add'l Debt	32.8947% Def Fed	6.0150% Def State	Total Def Tax
EOTP interest (7/11 - 3/12)	450,028	140,706					590,734	194,320	35,533	229,853
EOTP amort beg 4/12		(73,845)	(98,460)	(98,460)	(98,460)	(98,460)	(467,685)	(153,844)	(28,131)	(181,975)
Total EOTP	450,028	66,861	(98,460)	(98,460)	(98,460)	(98,460)	123,049	40,476	7,402	47,878
CIP interest (7/11 - 5/13)	415,582	726,147	320,463				1,462,192	480,984	87,951	568,935
CIP amort beg 6/13			(142,158)	(243,699)	(243,699)	(243,699)	(873,255)	(287,254)	(52,526)	(339,780)
Total CIP	415,582	726,147	178,305	(243,699)	(243,699)	(243,699)	588,937	193,730	35,425	229,155
CIS interest (5/12 - 5/13)		545,064	152,938				698,002	229,606	41,985	271,591
CIS amort beg 6/13			(33,931)	(58,167)	(58,167)	(58,167)	(208,432)	(68,563)	(12,537)	(81,100)
Total CIS	-	545,064	119,007	(58,167)	(58,167)	(58,167)	489,570	161,043	29,448	190,491
TOTAL	865,610	1,338,072	198,852	(400,326)	(400,326)	(400,326)	1,201,556	395,249	72,275	467,524

To HECO-WP-D4-001, page 3

The GL balance includes the AFUDC debt and the AFUDC additional debt.  
The Rate base balance includes just the AFUDC debt.  
The difference between GL and Rate base balance is the AFUDC additional debt.

HECO & SUBSIDIARIES  
Deferred Tax Asset - NOL Carryforward

As Recorded Gross	a		b		c		d		e		f		g		h		i		j	
	2010 Tax Ret (Loss)	2010 Amend/RAR Taxable Inc (Loss)	2010 Amend/RAR Return Fed	2011 Tax Ret (Loss)	2011 Amend/RAR Return Fed	2011 Amend/RAR Taxable Inc (Loss)	2012 Tax Ret (Loss)	2012 Amend/RAR Return Fed	2012 Amend/RAR Taxable Inc (Loss)	2013 Tax Ret (Loss)	2013 Amend/RAR Return Fed	2013 Amend/RAR Taxable Inc (Loss)	2014 Tax Ret (Loss)	2014 Amend/RAR Return Fed	2014 Amend/RAR Taxable Inc (Loss)	2015 Tax Ret (Loss)	2015 Amend/RAR Return Fed	2015 Amend/RAR Taxable Inc (Loss)	2016 Actual (Loss)	2016 Actual Taxable Inc
1 HECO, RHI, UBC	46,592,802	(2,452,466)	(2,452,466)	(63,882,338)	1,740,726	(32,023,585)	4,426,286	4,426,286	4,426,286	(43,462,445)	(52,278,272)	39,711,161	58,774,647	(42,853,584)	(14,998,754)	14,000,107	(998,647)	(9,307,781)	(9,307,781)	(9,307,781)
2 HELCO	7,457,348	(202,927)	(202,927)	7,254,421	(16,820)	7,237,601	2,370,605	2,370,605	2,370,605	719,873	2,114,511	47,781,080	72,173,729	(2,853,279)	(23,738,517)	(26,589,786)	(40,000,305)	(40,000,305)	(40,000,305)	(40,000,305)
3 MECCO	54,090,151	(2,655,393)	(2,655,393)	(56,745,546)	1,730,806	(29,653,080)	4,426,286	4,426,286	4,426,286	(42,743,772)	(51,114,511)	47,781,080	72,173,729	(2,853,279)	(23,738,517)	(26,589,786)	(40,000,305)	(40,000,305)	(40,000,305)	(40,000,305)
4 MECCO	5,388,129	9,472	9,472	(19,888,182)	(2,568)	(7,725,101)	(7,725,101)	(7,725,101)	(7,725,101)	(11,713,967)	(8,427,383)	17,453,911	167,172	(23,738,517)	(26,589,786)	(40,000,305)	(40,000,305)	(40,000,305)	(40,000,305)	(40,000,305)
5	59,438,280	(2,645,921)	(2,645,921)	(75,740,767)	1,728,238	(37,378,181)	4,426,286	4,426,286	4,426,286	(54,457,739)	(59,541,894)	65,241,001	72,340,901	(26,589,786)	(40,000,305)	(40,000,305)	(40,000,305)	(40,000,305)	(40,000,305)	(40,000,305)
Adjustments																				
6 HECO	(235,204)			7,753,875	18,294,269	18,294,269				7,977,213	7,115,451	7,853,184	3,131,900	51,890,668	18,161,734	3,261,883	21,423,617	23,883,910	23,883,910	23,883,910
7 HELCO	(387,462)			1,131,558	4,157,335	4,157,335				1,507,981	1,445,537	784,341	660,378	61,210,334	7,029,410	7,029,410	7,029,410	7,029,410	7,029,410	7,029,410
8	(602,666)			8,883,433	22,451,604	22,451,604				9,485,194	8,560,988	8,637,505	3,792,278	58,357,055	20,424,969	5,847,488	14,577,481	14,577,481	14,577,481	14,577,481
9 MECCO	(1,654,816)			942,477	3,485,656	3,485,656				1,683,843	1,700,763	648,670	224,817	68,239,744	23,883,910	23,883,910	23,883,910	23,883,910	23,883,910	23,883,910
10	(2,257,482)			9,827,910	25,937,260	25,937,260				11,189,037	10,281,751	9,284,175	4,017,093	9,037,084	49,319,971	58,357,055	16,707,107	41,649,948	41,649,948	41,649,948
As Adjusted																				
11 HECO	46,357,598	(2,452,466)	(2,452,466)	(56,128,463)	1,740,726	(13,729,416)	4,426,286	4,426,286	4,426,286	(35,485,232)	(45,162,821)	47,564,325	61,906,547	(42,853,584)	(14,998,754)	14,000,107	(998,647)	(9,307,781)	(9,307,781)	(9,307,781)
12 HELCO	7,089,887	(202,927)	(202,927)	6,886,960	(16,820)	6,870,140	2,370,605	2,370,605	2,370,605	703,053	2,114,511	47,781,080	72,173,729	(2,853,279)	(23,738,517)	(26,589,786)	(40,000,305)	(40,000,305)	(40,000,305)	(40,000,305)
13	53,447,485	(2,655,393)	(2,655,393)	(56,102,878)	1,730,806	(29,653,080)	4,426,286	4,426,286	4,426,286	(42,743,772)	(51,114,511)	47,781,080	72,173,729	(2,853,279)	(23,738,517)	(26,589,786)	(40,000,305)	(40,000,305)	(40,000,305)	(40,000,305)
14 MECCO	3,733,313	9,472	9,472	(17,943,705)	(2,568)	(4,239,445)	(4,239,445)	(4,239,445)	(4,239,445)	(10,030,124)	(8,726,620)	18,100,581	391,989	(16,707,107)	(18,707,107)	(20,707,107)	(22,707,107)	(24,707,107)	(26,707,107)	(28,707,107)
15	57,180,798	(2,645,921)	(2,645,921)	(65,812,857)	1,728,238	(37,378,181)	4,426,286	4,426,286	4,426,286	(54,457,739)	(59,541,894)	65,241,001	72,340,901	(26,589,786)	(40,000,305)	(40,000,305)	(40,000,305)	(40,000,305)	(40,000,305)	(40,000,305)

Reconciliation to HECO ADIT Balance:

Net Operating Loss Deferred Tax Asset	(988,647)	(Line 3, Column 1)
Federal Tax Credit Carryforwards	(2,549,478)	
Charitable Contribution	7,913	
Rounding	1	
HECO ADIT Balance Recorded - Federal	(3,540,211)	HECO WP-04-001

\* HECO records deferred tax asset based on combined HECO and HELCO income.  
\*\* Includes RAR adjustments related to Net Operating Loss carryback

ADIT	3,257,752.00	HECO-WP-04-001, page 3
NOL	(7,812,931)	HECO-WP-04-001, page 3
NOL-Charitable	290,372.00	HECO-WP-04-001, page 3
NOL-Credits	3,540,211.07	
Total	3,257,752.00	

**HAWAIIAN ELECTRIC CO., INC.**  
**ADJUSTMENTS TO NOL FOR RATEMAKING**

	Tax Return 2010	Tax Return 2011	Tax Return 2012	Tax Return 2013	Tax Return 2014
Nonutility Taxable (Income)/Loss	1,231,495	654,234	74,612	2,291,512	1,700,219
RHI	7,631	4,985	2,029	1,897	345
UBC	12,182	13,962	875		
Charitable Contributions	884,073			768,773	
CIS Project Costs	654,557	3,220,776	14,732,263	incl in non utility	
DPAD - HELCO					
Executive Compensation	1,383,049	2,231,784	2,787,606	3,250,537	4,131,904
Interest - IRS Examination	(6,803,000)		228,382	55,366	74,921
Executive Life	693,692	792,616	124,923	587,748	489,073
Rewards Program	1,605,981	1,288,679	1,059,775	1,385,141	1,065,539
State Tax Adjustment	95,136	(453,161)	(716,196)	(363,761)	(346,550)
Total adjustments	(235,204)	7,753,875	18,294,269	7,977,213	7,115,451

NOTE: The adjustments to the tax NOL carryforward removes those tax deductions related to expenses that have not been previously approved by the Commission. These tax deductions are related to costs excluded from the revenue requirement calculation for ratemaking purposes. The starting point on page 1 is the NOL used for financial statement purposes, including executive benefits, bonuses, other nonutility deductions and the tax deductions related to write downs. Consequently, the adjustments represent the tax deductions included in the NOL or taxable income for the listed years.

Note that some ADIT items that are excluded from rate base (vacation accrual, reserves, bad debts) are not adjustments to the NOL carryforward calculation because the related expenses are ultimately recovered in revenue requirement, albeit on a cash basis. For tax purposes, these items are deducted on a cash basis, thus no adjustment is required.

**HAWAII ELECTRIC LIGHT CO., INC.**  
**ADJUSTMENTS TO NOL FOR RATEMAKING**

	Tax Return 2010	Tax Return 2011	Tax Return 2012	Tax Return 2013	Tax Return 2014	Tax Return 2015	Accrual 2016
Nonutility Taxable (Income)/Loss	67,761	59,037	(100,544)	1,229,284	1,144,700	462,614	286,240
Charitable Contributions	67,399	38,376	24,475	19,171	24,500	24,500	24,500
CIS Project Costs	(29,738)	14,820	3,499,109	incl in non utility			
Executive Compensation	16,893	145,682	158,376	190,057	256,233	276,991	249,652
Electric Discount	147,573	2,232					
HMSA Premium Adjustment	147,154	132,400	22,245	7,415	-		
Interest - IRS Examination	(1,817,000)		(121,351)	(180)	8,099		
Executive Life	15,364						
Keahole Project Costs	760,980	760,982	762,272	incl in non utility			
Rewards Program	228,298	46,670	45,905	80,071	31,259	40,826	123,929
State Tax Adjustment	27,854	(68,641)	(133,152)	(17,837)	(19,254)	(20,590)	(23,945)
<b>Total adjustments</b>	<b>(367,462)</b>	<b>1,131,558</b>	<b>4,157,335</b>	<b>1,507,981</b>	<b>1,445,537</b>	<b>784,341</b>	<b>660,376</b>

NOTE: The adjustments to the tax NOL carryforward removes those tax deductions related to expenses that have not been previously approved by the Commission. These tax deductions are related to costs excluded from the revenue requirement calculation for ratemaking purposes. The starting point on page 1 is the NOL used for financial statement purposes, including executive benefits, bonuses, other nonutility deductions and the tax deductions related to write downs. Consequently, the adjustments represent the tax deductions included in the NOL or taxable income for the listed years.

Note that some ADIT items that are excluded from rate base (vacation accrual, reserves, bad debts) are not adjustments to the NOL carryforward calculation because the related expenses are ultimately recovered in revenue requirement, albeit on a cash basis. For tax purposes, these items are deducted on a cash basis, thus no adjustment is required.

**MAUI ELECTRIC CO., LTD.**  
**ADJUSTMENTS TO NOL FOR RATEMAKING**

	Tax Return 2010	Tax Return 2011	Tax Return 2012	Tax Return 2013	Tax Return 2014	Tax Return 2015	Accrual 2016
Nonutility Taxable (Income)/Loss	(926,853)	171,847	9,708	424,040	1,351,784	347,757	(34,975)
Charitable Contributions	41,189		-	-	-	110,368	
CIS Project Costs	(84,209)	169,241	3,142,682	included in nonutility			
Executive Compensation	48,625	235,724	159,377	140,226	167,981	169,167	169,496
Interest - IRS Examination	(993,000)		(14,313)	(551)	4,638	171	
IRP/DSM costs	-	85,857	78,629	891,975	31,560		
Executive Life		172,136		-			
Rewards Plan	212,842	156,992	201,372	224,223	168,922	31,274	106,923
State Tax Adjustment	46,590	(49,320)	(91,799)	3,930	(24,122)	(12,067)	(16,627)
Total adjustments	(1,654,816)	942,477	3,485,656	1,683,843	1,700,763	646,670	224,817
	Note (3)	Note (3)	Note (3)				

**NOTES:**

- (1) The adjustments to the tax NOL carryforward removes those tax deductions related to expenses that have not been previously approved by the Commission. These tax deductions are related to costs excluded from the revenue requirement calculation for ratemaking purposes. The starting point on page 1 is the NOL used for financial statement purposes, including executive benefits, bonuses, other nonutility deductions and the tax deductions related to write downs. Consequently, the adjustments represent the tax deductions included in the NOL or taxable income for the listed years.
- (2) Note that some ADIT items that are excluded from rate base (vacation accrual, reserves, bad debts) are not adjustments to the NOL carryforward calculation because the related expenses are ultimately recovered in revenue requirement, albeit on a cash basis. For tax purposes, these items are deducted on a cash basis, thus no adjustment is required.
- (3) Total adjustments for Tax Return years 2010, 2011 and 2012 differ from the 2014 Annual Decoupling filing due primarily to executive compensation adjustments. The adjustments relate to additional executive compensation that should have been included as an adjustment for these years. This has no impact on revenue requirements since the deferred tax asset related to the NOL is excluded for decoupling purposes.

Hawaiian Electric Company, Inc.  
2016 Major Projects Excess Cost

(1) Grandparent # or Project #	(1) Project	(2) Date in Service	(3) Gross Plant Add Thru 12/31/15 (A)	(4) Gross Plant Add Thru 12/31/16 (B)	(5) Plant Acct	(6) Docket No 2010-0053 Depr Rate (C)	(7) 2016 Depr (D) = (A) * (C)	(8) 2017 Depr (E) = (B) * (C)	(9) Gross PUC Approved (F)	(10) 2015 Cost in Excess of Docket (G) = (B) - (F)	(11) Prior Years Depr Related to Excess (H)	(12) 2016 Depr Related to Excess (J) = (G) / (A) * (F)	(13) 2017 Depr Related to Excess (K) = (H) / (B) * (E)	(14) Cumulative Depr Related to Excess (L) = (I) + (J)
Y00138	Kahuku Wind Power	2010/12	2,132,812	2,132,812	397	0.06670	338,940	338,940	2,125,651	7,161	6,595	478	478	7,073
P0001399	W8 Main Transformer Replace	2011/08	2,600,439	2,600,439	315	0.02430	63,191	63,191	2,357,425	243,014	25,439	5,905	5,905	31,344
P7650000	W8 Boiler Controls Upgrade	2011/08	6,310,672	6,310,672	312	0.02030	128,107	128,107	5,236,138	1,074,534	84,126	21,813	21,813	105,939
P7590000	W7 Controls Upgrade	2011/11	5,445,577	5,445,577	312	0.02030	110,545	110,545	5,021,440	424,137	19,134	8,610	8,610	27,844
Y00038	Kalaheo Makalei-Hihi 25KV DL	2013/07	7,163,447	7,163,447	367	0.04950	356,740	356,740	3,399,547	3,763,900	303,358	187,442	187,442	490,710
			480,353	480,353	368	0.05300	24,978	24,978	227,960	353,392	24,106	13,124	13,124	37,230
			7,643,799	7,643,799			381,718	381,718	3,627,507	4,016,292	327,374	200,567	200,567	527,941
Y00038	Kalaheo Makalei-Hihi 25KV DL	2014/04	5,423,740	5,423,740	367	0.04950	270,102	270,102	4,013,624	1,410,116	47,072	70,224	70,224	117,296
Y00038	Kalaheo Makalei DOT Queen-Cook	2014/04	93,649	93,649	364	0.03390	3,175	3,175	70,978	47,616	22,671	1,614	1,614	3,228
			67,769	67,769	365	0.04190	2,840	2,840	51,363	34,457	16,406	1,444	1,444	2,888
			26,632	3,272,205	366	0.02190	583	71,661	2,480,068	13,541	792,137	297	17,348	593
			1,943,810	1,588,979	367	0.04980	96,802	79,131	1,204,318	988,333	384,661	49,219	19,156	77,581
			248,556	248,556	368	0.05200	12,925	12,925	188,385	126,379	6,572	6,572	3,129	13,143
			2,380,416	5,271,158			116,324	165,732	3,995,113	1,210,326	38,288	59,145	41,089	97,433
P0005000	BPT Tank 133 Improvements	2014/12	7,188,095	7,188,095	312	0.02030	145,918	145,918	6,995,582	192,513	-	3,908	3,908	3,908

[1] Source: HECO-WP-D2-001

[2] 2016 & 2017 Depr were estimated using proportion of Net Plant Adds Thru 12/31/13 to Net Plant Adds Thru 12/31/12 applied to 2012 Depr. 2016 Depr Related to Excess calculated using (C) Docket No 2010-0053 Depr Rate \* (H) 2016 Cost in Excess of Docket.  
2017 Depr Related to Excess calculated using (C) Docket No 2010-0053 Depr Rate \* (H) 2016 Cost in Excess of Docket.

[3] Source: Transmittal No. 15-01 (Decoupling) - Hawaiian Electric Company RBA Rate Adjustment, HECO-WP-E-001, filed on March 31, 2016.

[4] Source: Transmittal No. 15-01 (Decoupling) - RBA Rate Adjustment (Filed March 31, 2016), HECO-WP-E-001, sum of "Prior Years Depr Related to Excess" and "2015 Depr Related to Excess".

[5A] - Kalaheo Makalei DOT Queen-Cook Gross Plant Adds Thru 12/31/16 reflects actual CIAC received to date:  
\$ 2,445,135 Net Plant adds thru 12/31/2016 - HECO-WP-D2-001  
2,835,023 CIAC received thru 12/31/2016 - HECO-WP-D2-001  
\$ 5,271,158 Gross Plant Adds Thru 12/31/16 - HECO-WP-D2-001

[5B] - Kalaheo Makalei DOT Queen-Cook Gross PUC Approved represents Net PUC Allowed per the docket plus CIAC received to date:  
\$ 1,170,090 Net amount approved by PUC - 08-0 - HECO-WP-D2-001  
2,835,023 CIAC received thru 12/31/2016 - HECO-WP-D2-001  
\$ 3,995,113 2016 Gross PUC Approved amount - HECO-WP-D2-001



Hawaiian Electric Company  
Calculation of Composite Effective Income Tax Rates  
Federal and State

Composite Federal and State Effective Income Tax Rate

Federal Effective Income Tax Rate	32.8947368% MECO-RWP-1501, p. 1 (Docket No. 2011-0092)
State Effective Income Tax Rate	6.0150376% MECO-RWP-1501, p. 1 (Docket No. 2011-0092)
	<u>38.9097744%</u>

Calculation of Effective Rates

Assumptions: ST = State Income Tax Expense  
FT = Federal Income Tax Expense  
Pre-Tax Income = \$1.00  
State Statutory Income Tax Rate = 6.4%  
Federal Statutory Income Tax Rate = 35%

Calculation of State Effective Income Tax Rate

State Income Tax Expense = Statutory Rate x (Pre-Tax Income - State Income Tax Expense)

$$ST = .064 \times (1 - ST)$$

$$ST = .064 - .064(ST)$$

$$1.064(ST) = .064$$

$$ST = .060150376 \text{ or } 6.0150376\% \text{ of Pre-Tax Income}$$

Calculation of Federal Effective Income Tax Rate

Federal Income Tax Expense = Statutory Rate x (Pre-Tax Income - State Income Tax Expense)

$$FT = .35 \times (1 - ST)$$

$$FT = .35 \times (1 - .060150376)$$

$$FT = .35 - .0210526316$$

$$FT = .328947368 \text{ or } 32.8947368\% \text{ of Pre-Tax Income}$$

HAWAIIAN ELECTRIC COMPANY, INC.  
TAX REPAIRS ADJUSTMENT  
2017

			A	B	C = A x B	D = A - C
		HECO-WP- F1-002 5 YR LIFE AVERAGE	Plant Adds	HECO-WP- F1-001, pg 2 Repairs Allocation	Repairs Deduction	Depreciable Basis
Computers/PV	5	7,067				
Communication	20	4,073				
Off/Furn/Tools	7	5,979				
Distribution	20	117,895	117,895,000	24.46%	28,837,156	89,057,844
Land	-	1,435				
Non-Steam Production	15	2,404	2,404,000	0.00%	0	2,404,000
Steam Production	20	29,775	29,775,000	30.30%	9,021,391	20,753,609
Structural	39	4,035				
Transmission	20	24,492	24,492,000	4.72%	1,155,087	23,336,913
Transmission	15	39,786	39,786,000	4.72%	1,876,380	37,909,620
Vehicles	-	7,455				
TOTAL		<u>244,396</u>	<u>214,352,000</u>		<u>40,890,014</u>	<u>173,461,986</u>
					To Sch F1	

NOTE 1> This schedule computes the estimated amount of deductible tax repairs related to the baseline plant additions for the RAM year. The deductible tax repairs amounts are carried forward to Schedule F1 and serve to reduce the depreciable tax basis for the baseline plant additions. The repairs percentages (Column B) are calculated on HECO-WP-F1-001, page 2.

NOTE 2> The numbers (excluding %s) are rounded to the nearest thousand.

**HAWAIIAN ELECTRIC COMPANY, INC.  
REPAIRS DEDUCTION**

		Distribution	Non Steam	Steam	Transmission
Repairs %:					
Total book basis repairs					
2012		28,124,175	-	16,538,376	2,354,859
2013		26,024,478		12,206,812	3,034,166
2014		40,010,784		8,698,003	1,620,540
2015		28,855,969		8,823,262	3,152,508
2016		29,598,324		4,347,263	5,544,086
		152,613,730	0	50,613,716	15,706,159
Total book basis adds					
2012	HECO-WP-F1-002	101,864,000	773,000	53,661,000	65,710,000
2013	HECO-WP-F1-002	114,622,000	101,000	32,635,000	81,220,000
2014	HECO-WP-F1-002	139,366,000	12,311,000	30,119,000	57,957,000
2015	HECO-WP-F1-002	150,513,000	5,613,000	25,823,000	48,871,000
2016	HECO-WP-F1-002	117,566,000	268,000	24,812,000	79,269,000
		623,931,000	19,066,000	167,050,000	333,027,000
<b>AVERAGE %</b>		<b>24.460033%</b>	<b>0.000000%</b>	<b>30.298543%</b>	<b>4.716182%</b>

NOTE 1> With the assistance of Price Waterhouse Coopers, the repairs deduction analysis was performed in 2010, 2012, 2015 and 2016 in connection with changing HECO's method of identifying deductible repairs for tax accounting purposes. The repairs percentage for each functional group represents the five year weighted average of the identified repairs costs.

NOTE 2> The numbers (excluding %s) are rounded to the nearest thousand.

HAWAIIAN ELECTRIC COMPANY, INC.  
BASELINE PLANT ADDS

	LIFE	2012 ACTUAL			2013 ACTUAL			2014 ACTUAL		
		PROJECTS	PROGRAMS	TOTAL	PROJECTS	PROGRAMS	TOTAL	PROJECTS	PROGRAMS	TOTAL
Computers/PV	5	1,426	5,120	6,546	1,559	6,350	7,909		6,681	6,681
Communication	20	7,175	806	7,981	4,708	1,661	6,369	3,516	1,824	5,340
Off/Furn/Tools	7	4,438	2,589	7,027	1,751	5,599	7,350	4,590	3,652	8,242
Distribution	20	43,704	58,160	101,864	25,611	89,011	114,622	33,784	105,582	139,366
Land	-	-	77	77	6,320	82	6,402	1,274	455	1,729
Non-Steam Production	15	773		773	101	-	101	12,311	-	12,311
Steam Production	20	47,762	5,899	53,661	29,864	2,771	32,635	27,547	2,572	30,119
Structural	39	3,265	182	3,447	6,479	235	6,714	2,278	621	2,899
Transmission	20	12,815	11,767	24,582	12,962	11,484	24,446	1,491	11,804	13,295
Transmission > 69kv	15	22,880	18,248	41,128	43,386	13,388	56,774	36,204	8,458	44,662
		35,695	30,015	65,710	56,348	24,872	81,220	37,695	20,262	57,957
Vehicles	-		8,892	8,892	-	9,498	9,498		4,682	4,682
TOTAL		144,238	111,740	255,978	132,741	140,079	272,820	122,995	146,331	269,326

	LIFE	2015 ACTUAL			2016 ACTUAL			LESS MAJOR PROJECTS		
		PROJECTS	PROGRAMS	TOTAL	PROJECTS	PROGRAMS	TOTAL	PROJECTS	PROGRAMS	TOTAL
Computers/PV	5	2,718	6,262	8,980	46	5,173	5,219			-
Communication	20	1,054	4,129	5,183	2,954	2,916	5,870	(10,379)		(10,379)
Off/Furn/Tools	7	3,406	909	4,315	171	2,793	2,964			-
Distribution	20	16,208	134,305	150,513	17,667	99,899	117,566	(34,452)		(34,452)
Land	-	1,202	31	1,233		11	11	(2,276)		(2,276)
Non-Steam Production	15	5,613		5,613	268		268	(7,045)		(7,045)
Steam Production	20	22,516	3,307	25,823	21,860	2,952	24,812	(18,173)		(18,173)
Structural	39	4,832	636	5,468	886	761	1,647			-
Transmission	20	10,539	10,922	21,461	30,240	8,436	38,676			-
Transmission > 69kv	15	26,004	1,406	27,410	40,530	63	40,593	(11,641)		(11,641)
		36,543	12,328	48,871	70,770	8,499	79,269	(11,641)	-	(11,641)
Vehicles	-		10,540	10,540		3,665	3,665			-
TOTAL		94,092	172,447	266,539	114,622	126,669	241,291	(83,966)	-	(83,966)

	LIFE	TOTAL (2012 - 2016)			AVERAGE (2012 - 2016)			AVERAGE (2012 - 2016)		
		PROJECTS	PROGRAMS	TOTAL	PROJECTS	PROGRAMS	TOTAL	PROJECTS	PROGRAMS	TOTAL
					← To Sch F1 →			← To Sch F1 →		
Computers/PV	5	5,749	29,586	35,335	1,150	5,917	7,067	0.47%	2.42%	2.89%
Communication	20	9,028	11,336	20,364	1,806	2,267	4,073	0.74%	0.93%	1.67%
Off/Furn/Tools	7	14,356	15,542	29,898	2,871	3,108	5,979	1.17%	1.27%	2.45%
Distribution	20	102,522	486,957	589,479	20,504	97,391	117,895	8.39%	39.85%	48.24%
Land	-	6,520	656	7,176	1,304	131	1,435	0.53%	0.05%	0.59%
Non-Steam Production	15	12,021	-	12,021	2,404	-	2,404	0.98%	0.00%	0.98%
Steam Production	20	131,376	17,501	148,877	26,275	3,500	29,775	10.75%	1.43%	12.18%
Structural	39	17,740	2,435	20,175	3,548	487	4,035	1.45%	0.20%	1.65%
Transmission	20	68,047	54,413	122,460	13,609	10,883	24,492	5.57%	4.45%	10.02%
Transmission > 69kv	15	157,363	41,563	198,926	31,473	8,313	39,786	12.88%	3.40%	16.28%
		225,410	95,976	321,386	45,082	19,196	64,278	18.45%	7.85%	26.30%
Vehicles	-	-	37,277	37,277	-	7,455	7,455	0.00%	3.05%	3.05%
TOTAL		524,722	697,266	1,221,988	104,944	139,452	244,396	42.94%	57.06%	100.00%

**Hawaiian Electric Company, Inc.**  
**2017 CIAC Additions - Major Projects Support**

Grandparent	Project	Functional Category	Project > Plant Addition Date	Project to Date	2017 CIAC Additions	Future Years
				Recorded 12/31/16		
Y00038	P0001579: Kakaako Makai DOT Queen-Cook	Distribution	201404	(2,825,023)	(900,000) N1	- N1

See Schedule G2 - Major Capital Project CIAC Additions (900,000)  
To Sch G2

N1 Source: UI Planner Budget Files - Forecast as of February 15, 2017.

HAWAIIAN ELECTRIC COMPANY, INC.  
AVERAGE RATE BASE AND RATE OF RETURN  
(\$ Thousands)

RATE BASE	REFERENCE	Month End	
		Dec-16	Dec-15
TOTAL UTILITY PLANT	Note 2	3,082,238	2,901,148
Adjustments:			
Construction Work in Progress		(180,194)	(147,979)
Retirement Work in Progress		(12,590)	(40,482)
Asset Retirement Obligation		(25,108)	(26,376)
Regulatory Liability for Cost of Removal		(275,705)	(247,494)
Other	GL#25365000	(5,780)	(6,960)
DEPRECIATED COST OF UTILITY PLANT IN SERVICE	Note 1	2,582,861	2,431,856
REGULATORY ASSETS - SFAS 109	Note 2	70,146	68,300
REG ASSET- CONTRIB vs. NPPC	GL#18676030	19,411	19,411
REGULATORY ASSET - PENSION NPPC vs. Rates	GL#18676040	97,614	81,709
REGULATORY ASSET - OPEB NPBC vs. Rates	GL#18677040	1,204	380
REGULATORY ASSET - RO PIPELINE	Note 2	4,958	5,075
MATERIALS & SUPPLIES (Excluding Stores Expense)	Note 2	29,446	29,284
MATERIALS & SUPPLIES ADJUSTMENT	HECO-WP-H-006	(1,116)	(1,214)
FUEL STOCK	Note 2	47,238	49,456
UNAMORTIZED DEFERRED OMS COSTS	GL#186070	1,217	1,688
UNAMORTIZED DEFERRED HR SUITE-PHASE 1	GL#186060	1,663	2,020
UNAMORTIZED DEFERRED HR SUITE-PHASE 2	GL#186061	640	768
UNAMORTIZED DEFERRED BUDGET SYSTEM PROJECT	GL#186077	1,030	1,176
UNAMORTIZED DEFERRED IVR COSTS	GL#18670400	1,116	1,233
UNAMORTIZED DEFERRED CIS COSTS	HECO-WP-D1-001B	10,266	11,486
	GL#18670124, #18670125,		
UNAMORTIZED EOTP REGULATORY ASSET	#18670126	444	798
UNAMORTIZED CIP REGULATORY ASSET	HECO-WP-D1-001A	2,306	3,261
WORKING CASH:	HECO-WP-H-007	7,421	12,830
DEDUCTIONS:			
Unamortized Contributions in Aid of Construction	Schedule G	347,827	319,728
Customer Advances for Construction	Note 2	3,581	2,776
Deferred Income Taxes	Schedule D4	525,719	489,988
Unamortized Investment Tax Cr - 1962 Revenue Act & STC	GL#255200, #255030	57,103	53,293
Rental Premiums - Kamoku	GL#25313000	0	0
Customer Deposits	GL#23501000	12,101	13,117
Unamortized Gain on Sales	GL#254001	248	218
Regulatory Liability Tracker True-up	GL#25400004	(5)	1,111
Regulatory Liability OPEB True-up	GL#25400002	4,818	4,243
TOTAL DEDUCTIONS		951,392	884,474
MONTH ENDED RATE BASE		1,926,473	1,835,043
SIMPLE AVERAGE RATE BASE		1,880,758	

Footnotes:

1. Includes Property Held for Future Use balance of \$0 for 2016 and 2015.
  2. See Hawaiian Electric Company Inc. Monthly Financial Report - December 2016, page 8, 9 & 10, filed February 24, 2017.
- \* Amounts may not add up due to rounding.

Earnings Sharing Mechanism  
Interest on Customer Deposit Correction

**Background**

Under Rule No. 6, the Company may require customers to provide a deposit intended to guarantee payment of bills for electric service. Cash deposits accrue simple annual interest at a rate of 6%. The interest is a company expense.

In July 2016, the Companies found that the interest expense being accrued for financial statement purposes had erroneously been overstated since May 2012. The overstatement resulted from incorrect programming of a report developed when the Customer Information System was implemented. The report miscalculated accrued interest on released deposits and for deposits that had been transferred to the new Customer Information System.

The following table summarizes the interest expense overstatement by year and by company:

Company	2012	2013	2014	2015	2016	Total
Hawaiian Electric	52,794	172,284	328,193	531,054	304,398	1,388,723
Hawaii Electric Light	15,744	42,584	73,925	113,423	56,596	302,272
Maui Electric	20,365	51,289	89,131	117,396	52,652	330,833
Total	88,904	266,158	491,249	761,873	413,645	2,021,828

**Impact of Error**

No customers were directly impacted by the error. Internal financial controls for this area have been reviewed and strengthened.

The error resulted in an immaterial overstatement of interest expense for financial reporting purposes. The misstatement was deemed immaterial and no prior period adjustment was warranted, as the adjustment was not material, individually or in the aggregate, to previously issued financial statements. The correction was reflected as a reduction in interest expense in 2016.

The immaterial overstatement of interest expense in the period 2012-2015 resulted in immaterial understatements of the Earnings Sharing Mechanism ("ESM"). Adjusting for the interest expense did not impact the ESM in the years which the ESM was not triggered; however, in the years that the ESM was previously triggered [2012 for Hawaiian Electric and 2013 and 2014 for Maui Electric], the amount of the ESM would have been slightly higher. The following summarizes the return on equity for ESM purposes with the adjustment to interest expense reflected in the respective year and company:

Company	ROE Trigger	2012	2013	2014	2015
Hawaiian Electric	10.0	10.70	8.96	9.87	9.23
Hawaii Electric Light	10.0	7.79	7.47	6.67	7.51
Maui Electric	9.0	6.70	9.36	9.50	8.79

The adjustments to the ESM are summarized below:

Company (\$000)	2012	2013	2014	2015	Total
Hawaiian Electric	14	-	-	-	14
Hawaii Electric Light	-	-	-	-	-
Maui Electric	-	14	24	-	38

The amount on Schedule H1, line 31 reflects the Additional Earnings Sharing Revenue Credits that will be offset against the Total RBA Revenue Adjustment on Schedule A. The RBA language does not specifically address corrections to a prior period where the ESM was triggered. However, the Company is applying interest using the short term debt rate of 1.75%, on a compounded basis.



HAWAIIAN ELECTRIC COMPANY, INC.  
Ratemaking Adjustments For Incentive Compensation And Other Non-Recoverable Expenses  
2018

Account/Activity No.	Description	YTD	Net of Tax	Rounded (000s)	
HR002244	LTIP expense	1,338,322			
HR002243	EICP expense	1,289,888			
HR002246	Manager award plan	359,865			
P8M723PHENENP22ZZZ2800	LTIP share expense (credit)	(16,400)			
Non-Executive Incentive Worksheet	Non-executive incentive programs	1,140,600			
Other Incentive Awards Worksheet	Other incentive awards	615,567			
Provided by HEI	HEI charges for incentive compensation	782,038	3,385,998	3,366	Incentive ➡ Line 2A
P#R0001202	Executive life insurance(COLI) expense (credit) <i>not tax deduct</i>	(430,710)			
93022 Schedule	Company memberships <i>not tax deduct</i>	39,084			
WO#AD000945/P#R0005071	(portion of EEI dues related to EEI's Government Affairs group, Communication, Marketing, Customer, and Employee Relations group)				
WO#FI002227	Costs associated with restatement of financial statements	2,842			
Provided by HEI	HEI charges for non-incentive comp (salaries/benefits) - executives (labor)	590,837			
Provided by HEI	HEI charges for outside services (plan admin, legal fees, audit fees) - executives (non-labor)	88,206			
HR002193/HR002057	Service awards program	47,584			
P#R0001093	HEIRS - Administration	37,246			
P#R0029195	Administrator - Exec Pension (Excess Plan)	22,229			
P#R0001091	Directors	(13,482)			
P#R0001087	Excess	313,087			
P#R0001088	SERP	133,021			
P#R0010240	OPEB (Executive life portion only)	402,147			
408040	Payroll taxes related to incentive compensation	168,480			
R0024482	Community service adm - AUW (labor)	220,998			
R0024482	Community service adm - AUW (non-labor)	139,501	922,256	922	Other ➡ Line 2B
	Total adjustment to operating income	7,268,978			
	Tax on adjustments	(2,980,724)			
	Net adjustment to operating income	4,288,254	4,288,254	4,288	
	Labor	5,722,548			
	Non-labor	1,546,430			
	Total adjustment to operating income	7,268,978			

HAWAIIAN ELECTRIC COMPANY, INC.  
Income Tax On Items To Be Replaced By Synchronized Interest  
2016

	Source	YTD	Rounded (000s)	
Total Interest Charges	PUC report	46,328,697		
Less: Int on Customer Deposits	Account 43105000	221,485		
AFUDC-Debt	NARUC 420030	(2,484,703)		
Amort of Inv Inc Differential	NARUC 403030	184,971	185	Line 2C
Equity in net income of trust	NARUC 421070	(100,516)		
		44,149,934		
	Tax rate	38.9097744%		
		17,178,640	(17,179)	Line 2D

HAWAIIAN ELECTRIC COMPANY, INC.  
Ratemaking Capitalization  
2016

	<u>Simple Average Balance*</u>	<u>Ratios</u>	<u>Cost Rate</u>	<u>Weighted Cost of Debt</u>
Short-Term Debt	43,499	2.01%	0.66%	0.01%
Long-Term Debt	856,436	39.65%	5.09%	2.02%
Hybrid Securities	28,541	1.32%	7.21%	0.10%
Preferred Stock	21,082	0.98%	5.38%	0.05%
Common Equity	1,210,614	56.04%	10.00%	5.60%
	<u>2,160,172</u>	<u>100.00%</u>		<u>7.78%</u>

	<u>NARUC/ GL Code</u>	<u>YTD Dec 2015</u>	<u>Rounded (000s)</u>	<u>Cost Rate</u>
Short-Term Debt:				
Interest on Debt Assoc Co	430	2,191,839		
Less: Interest on QUIDS	43006000	(2,050,516)		
Int Exp-Commercial Paper	43100000	143,744		
Int Exp-SCF Loans	43108000	0		
Int Inc-Assoc Cos.	419300	0		
		<u>285,067</u>	285	0.66%
Long-Term Debt:				
Amort of Debt Disc & Exp	428	1,725,362		
Less: Hybrid Sec Amort of Iss Exp	428QUID1-3 (see below)	(109,414)		
Interest on Long-Term Debt	427	41,821,436		
Amort Inv Inc Differential	403030	184,971		
		<u>43,622,355</u>	43,622	5.09%
Hybrid Securities:				
Interest on QUIDS	43006000	2,050,516		
Amort Exp-QUID1 Iss Exp	428QUID1	40,416		
Amort Exp-QUID2 Iss Exp	428QUID2	37,899		
Amort Exp-QUID3 Iss Exp	428QUID3	31,099		
Equity in Net Inc of Trust	421070	(100,516)		
		<u>2,059,414</u>	2,059	7.21%
Preferred Stock:				
Amort of Pfd Stk Iss Exp	42501000	55,086		
Preferred Stock dividends	437	1,079,907		
		<u>1,134,993</u>	1,135	5.38%

\* Short-Term Debt based on a 12 month average.

**HAWAIIAN ELECTRIC COMPANY, INC.**  
**Earning Sharing Credits Recorded (net of tax)**  
**2016**  
**Amounts in (\$000s)**

Earnings Sharing Credits Recorded	0
Revenue Taxes @ 8.885%	<u>0</u>
	0
Income Taxes @38.9097744%	<u>0</u>
Reduction to operating income	0

HAWAIIAN ELECTRIC COMPANY, INC.  
MATERIALS & SUPPLIES ADJUSTMENT  
(\$ Thousands)

Beg Balance at November 30, 2016	Note (1)		29,134
Additions		a	1,061
Issues			(961)
Adjustments			162
Ending Balance at December 31, 2016	↓		<u>29,396</u>
 # of Days in December		b	 31
 Average Daily Additions to Inventory		c=a/b	 34.23
Purchase Payment Lag Days	Note (2)	d	32.6
 Estimated Unpaid Inventory at December 31, 2016	Note (3)	e=cxd	 1,116
			To HECO-WP-H-001

**Footnotes:**

- 1 Source: Hawaiian Electric Company Inc. Combined Inventory Report for December 2016.
- 2 See Hawaiian Electric Company Inc. Docket No. 2010-0080 Hawaiian Electric Company Inc.'s 2011 test year rate case, HECO-WP-2003, page 1 & 2.
- 3 Material & Inventory Adjustment represents materials & supplies financed by accounts payable and is calculated in compliance with the Commission's D&O 14412 dated December 11, 1995, in Docket No. 7766.

HAWAIIAN ELECTRIC COMPANY, INC.  
WORKING CASH  
2016

Line No.	Description (a)	Reference (b)	2016 (c)	Net Collection Lag (Days) (d) Note (1)	Amount (e)=(c)/365*(d)
1	Fuel Oil	<i>Trial Balance: B20</i>	305,359	18.8	15,728
2	Purchased Power	GL #555	431,009	(1.6)	(1,889)
3	Current Income Taxes				
4	Income Tax	<i>Dec. 2016 PUC Monthly Report, Page 2</i>	4,251		
5	Income Tax related to Disallowed Items	HECO WP-H-002	2,981		
6	Reversal of Tax Related to Int Synch Replacement	<i>Sch H-Line 2d</i>	17,179		
7	Tax Eff of AFUDC Equity	GL #420100	(4,241)		
8	Tax Related to Int Synch	<i>Sch H-line 13 - 13a</i>	(15,587)		
9	Total	<i>Sum of Line 4-8</i>	4,583	(1.7)	(21)
10	Revenue Taxes				
11	Franchise	GL #408010	36,369		
12	PSC	GL #408020	87,799		
13	PUC Fee	GL #408030	7,460		
14	Total	<i>Sum of Line 11-13</i>	131,628	(52.5)	(18,933)
15	O&M Labor				
16	O&M labor	<i>Acct. Dept. O&amp;M report</i>	130,637		
17	Fuel O&M labor	<i>Acct. Dept. O&amp;M report</i>	(2,261)		
18	O&M Labor Excl Fuel Labor	<i>Line 16 + 17</i>	128,376		
19	Disallow O&M	HECO WP-H-002	(5,723)		
20	Total	<i>Line 18 + 19</i>	122,653	25.2	8,468
21	O&M Non-Labor				
22	O&M Expense	<i>Trial Balance: G30 (see O&amp;M Labor Excl Fuel Labor above)</i>	272,437		
23	O&M Labor Excl Fuel Labor		(128,376)		
24	Disallow O&M Non-Labor	HECO WP-H-002	(1,546)		
25	Bad Debt Expense	GL #904	(1,252)		
26	Pension Reg Asset/Liab Amort	HECO WP-H-007 pg. 2	389		
27	OPEB Reg Asset/Liab Amort	HECO WP-H-007 pg. 2	1,349		
28	Sys Develop Amortization	HECO WP-H-007 pg. 2	(1,101)		
29	Total	<i>Sum of Line 22-28</i>	141,900	8.8	3,421
30	Payroll Taxes	GL #408050	9,669	21.1	559
31	Interest on Customer Deposits	GL #43105000	(221)	(145.7)	88
32	Working Cash	<i>Sum of Line 1, 2, 9, 14, 20, 29, 30, 31</i>			7,421
					To HECO-WP-H-001

## Footnotes:

- 1 See Docket No. 2010-0080, PUC Interim D&O, Exhibit B, page 2, filed July 22, 2011.

HAWAIIAN ELECTRIC COMPANY, INC.  
O&M Non-Labor  
2016

**Pension Regulatory Asset Amortization**

Standard Journal Entry No.							O&M %	
<u>PAA128</u>	<u>PAA129</u>	<u>PAA151</u>	<u>PAA152</u>	<u>PAA153</u>	<u>PAA202</u>	<u>Total</u>	Portion	<b>Rounded</b>
<u>2008</u>	<u>1/09-7/09</u>	<u>8/09-12/09</u>	<u>2010</u>	<u>1/11-7/11</u>	<u>2008-2011</u>		<u>70.69%</u>	<u>000s</u>
							<i>Note 1</i>	
(305,487)	822,714	(713)	(982,670)	145,233	(229,255)	(550,178)	(388,921)	(389)

**OPEB Regulatory Asset Amortization**

Standard Journal Entry No.							O&M %	
<u>PAA130</u>	<u>PAA135</u>	<u>PAA154</u>	<u>PAA155</u>	<u>PAA156</u>	<u>PAA203</u>	<u>Total</u>	Portion	<b>Rounded</b>
<u>2008</u>	<u>1/09-7/09</u>	<u>8/09-12/09</u>	<u>2010</u>	<u>1/11-7/11</u>	<u>2008-2011</u>		<u>70.69%</u>	<u>000s</u>
							<i>Note 1</i>	
(77,785)	(37,133)	(51,360)	(577,691)	(369,524)	(795,335)	(1,908,828)	(1,349,351)	(1,349)

**System Development Amortization**

Standard Journal Entry No.					
<u>PAA109</u>	<u>PAA133</u>	<u>PAA143</u>	<u>PAA163</u>		<b>Rounded</b>
<u>18607004</u>	<u>18606004</u>	<u>18606104</u>	<u>18607704</u>		<u>000s</u>
<u>OMS</u>	<u>Phase 1</u>	<u>Phase 2</u>	<u>Replace</u>	<u>Total</u>	
471,037	356,462	127,940	145,469	1,100,909	1,101

Footnote:

- 1 See Docket No. 2010-0080, Parties' Stipulated Settlement Letter, Exhibit 1, page 82, filed July 5, 2011.

## Earnings Sharing Mechanism

## Cost of Capital

**Cost of capital methodology consistently used in Earnings Sharing Mechanism actual filings and reviewed by Office of Consumer Advocacy and reviewed and approved by the Public Utilities Commission have been based on the actual cost of capital**

In 2010, the PUC issued an order approving decoupling, which was implemented by Hawaiian Electric on March 1, 2011, by Hawaii Electric Light on April 9, 2012 and by Maui Electric on May 4, 2012. The Earnings Sharing Mechanism ("ESM") calculations became applicable for each of the respective companies, in the year following decoupling implementation. Therefore, the first ESM filings were in the 2012 Annual Filing for Hawaiian Electric and 2013 Annual Filings for Hawaii Electric Light and Maui Electric. ESM calculations in the Annual Filing are for the preceding calendar year.

All ESM calculations filed have incorporated the actual recorded cost of capital for ratemaking purposes. The treatment is thought to be based on discussions held in the 2011 timeframe; however the Companies are unable to locate any documentation of this approach.

**Use of the actual cost of capital has resulted in capital cost savings being passed to customers via the ESM**

Customers have paid lower rates as a result of lower interest rates which have been passed through the ESM. In most cases, the return on equity calculated using the last test year would have been lower than the return on equity which was filed based on actual financing rates and weights. If the rate case cost of capital had been used in the ESM calculation:

- The Hawaiian Electric 2012 ESM would have been \$1.8 million lower.
- Maui Electric would not have triggered the 2013 ESM (as opposed to the ESM of \$0.4 million).
- The Maui Electric 2014 ESM would have been \$0.2 million lower.

**Summary - Ratemaking Rate of Return for Earnings Sharing Mechanism**

	HECO		HELCO		MECO	
	Filed	Revised	Filed	Revised	Filed	Revised
Dec 2011	8.03%	7.71%				
Dec 2012	10.70%	10.21% (A)	7.79%	7.75%	6.69%	6.73%
Dec 2013	8.95%	8.59%	7.46%	7.39%	9.35%	8.92% (B)
Dec 2014	9.85%	9.52%	6.65%	6.59%	9.47%	9.26% (C)
Dec 2015	9.20%	8.89%	7.49%	7.22%	8.76%	8.77%
	ESM - filed	ESM - revised	Diff			
(A) - HE	2,586.19	814.27	1,771.92			
(B) - ME	366.71		366.71			
(C) - ME	520.522	285.937	234.59			
Total	3,473.42	1,100.21	2,373.22			



Only the MECO 2012 and 2015 ROE calculations would be slightly higher using actual financing rates and weights. In both years, the higher ROE rates using the rate case cost of capital (6.73% in 2012 and 8.77% in 2015) are still lower than the 9.0% ROE allowed and still would not have triggered an ESM credit.

See attached back-up calculations.

#### **Proposed clarification within the tariff**

In researching, the basis for the cost of capital for the ESM calculations, the Companies found that the Commission decision in Final Decision and Order filed August 31, 2010 in Docket No. 2008-0274, the Order states:

“Capital ratios and costs rates will be retained as authorized in either the most recently issued rate case interim or final decision, and synchronized interest will be updated using methods employed in that last rate case for purposes of the earnings sharing mechanism.”<sup>1</sup>

The methodology was adopted as proposed in the Joint Final Statement of Position of the HECO Companies and Consumer Advocate filed May 11, 2009 in Docket No. 2008-0274. The identical statement can be found in the Joint Final Statement of Position p. 19.

As discussed above, however, the practice has been to use the actual cost of capital in calculating the ESM. This practice has resulted in greater savings to customers than using the cost of capital from the last rate case.

In order to clarify that actual cost of capital should be used in the ESM calculation, the Companies propose to add clarifying language in the tariff. Please see the redline version of the tariff in Attachment 1A which specifies that the cost of capital for the ESM calculation is based on actuals.

---

<sup>1</sup> Final Decision and Order and Dissenting Opinion of Leslie H. Kondo, Commissioner filed August 31, 2010 in Docket No. 2008-0274 Instituting a Proceeding to Investigate Implementing a Decoupling Mechanism for Hawaiian Electric Company, Inc., Hawaii Electric Light Company, Inc. and Maui Electric Company, Limited p. 61.

	Rate Case		Reference
	Actual (Filed)	Cost of Capital	
Dec 2011	8.03%	7.71%	page 4
Dec 2012	10.70%	10.21%	page 5
Dec 2013	8.95%	8.59%	page 6
Dec 2014	9.85%	9.52%	page 7
Dec 2015	9.20%	8.89%	page 8

Reference  
HAWAIIAN ELECTRIC COMPANY  
DECOUPLING CALCULATION WORKBOOK  
EARNINGS SHARING CALCULATIONS  
All Amounts \$000 (Except %)  
page 8

Line No.	Description (a)	Reference (b)	Ratemaking Basis Return on Equity		
			Operating Income (c)	Rate Base (d)	Rate of Return (e)
1	Reported Operating Income before ratemaking adjustment	Dec 2011 Mo. PUC rpt, pg 2A filed 2/21/12 & HECO-WP-H-001	92,731	\$ 1,401,151	
2	<u>Ratemaking Adjustments to Line 1:</u>				
2a	Incentive Compensation Expenses (net of tax)	HECO-WP-H-002	2,420		
2b	Discretionary and Other Expenses Not Recoverable (net of tax)	HECO-WP-H-002	768		
2c	Amortization of investment income differential	HECO-WP-H-003	222		
2d	Income tax on items to be replaced by synchronized interest	HECO-WP-H-003	(13,681)		
3	Ratemaking Basis Amounts - Post Tax	Sum Lines 1 & 2	\$ 82,460	\$ 1,401,151	
4	<u>Ratemaking Capitalization</u>		Balances	Ratios	Cost Rate
5	Short-Term Debt (12 mo. Avg)		\$ 38,210	2.35%	1.75%
6	Long-Term Debt (Simple Avg)		\$ 624,620	38.36%	5.86%
7	Hybrid Securities (Simple Avg)		\$ 27,994	1.72%	7.36%
8	Preferred Stock (Simple Avg)		\$ 20,806	1.28%	5.46%
9	Common Equity (Simple Avg)		\$ 916,533	56.29%	10.00%
10	Total Capitalization	HECO-WP-H-004	\$ 1,628,163	100.00%	8.11%
11	Line 3 Rate Base Amount			\$ 1,401,151	
12	Weighted Cost of Debt			2.42%	
13	Synchronized Interest Expense			\$ 33,648	
	Income Tax Factor			1.636929121	
13a	Synchronized Interest Expense, net of tax			\$ 20,678	
14	Post Tax Income Available for Preferred & Common (Line 3 - Line 13a)				\$ 61,782
17	Less: Preferred Income Requirement (Line 8 Weighted Cost times Rate Base)				978
18	Income Available for Common Stock				\$ 60,805
19	Ratemaking Equity Investment (Line 9 Ratio times Rate Base)				788,742
20	Return on Equity for Decoupling Earnings Sharing				7.71%
21	<u>Earnings Sharing Revenue Credits:</u>		Basis Points		
22	Achieved ROE (basis points)		771		
23	Authorized Return (basis points)		1,000		
24	ROE for sharing (basis points)		-		
25	Sharing Grid per RAM Provision		First 100 bp	Next 200 bp	All over 300 bp
26	Distribution of Excess ROE (basis points)		0	0	0
27	Ratepayer Share of Excess Earnings		25%	50%	90%
28	Ratepayer Earnings Share - Basis Points		-	-	-
29	Revenue Credit per Basis Point (Note 2)				\$ 142
30	Earnings Sharing Revenue Credits (thousands)				\$ -

## Footnotes:

1	Composite Federal & State Income Tax Rate	38.91%
	Income Tax Factor ( 1 / 1-tax rate)	1.636929121
2	Ratemaking Equity Investment (line 19)	\$ 788,742
	Basis Point = 1/100 of a percent	0.01%
	Earnings Required per Basis Point (thousands)	\$ 78.87
	Times: Income Tax Conversion Factor	1.636929121
	Pretax Income Required per Basis Point (thousands)	\$ 128
	Times: Revenue Tax Conversion Factor	1.0975
	Revenue Requirement per Basis Point (thousands)	\$ 142

Reference  
**HAWAIIAN ELECTRIC COMPANY, INC.**  
**DECOUPLING CALCULATION WORKBOOK**  
**EARNINGS SHARING CALCULATIONS**  
 All Amounts \$000 (Except %)  
 page 8

Line No.	Description (a)	Reference (b)	Ratemaking Basis Return on Equity		
			Operating Income (c)	Rate Base (d)	Rate of Return (e)
1	Reported Operating Income before ratemaking adjustment	Dec 2012 Mo. PUC rpt, pg 2A filed 2/21/12 & HECO-WP-H-001	\$ 119,924	\$ 1,531,776	
2	<u>Ratemaking Adjustments to Line 1:</u>				
2a	Incentive Compensation Expenses (net of tax)	HECO-WP-H-002	3,782		
2b	Discretionary and Other Expenses Not Recoverable (net of tax)	HECO-WP-H-002	868		
2c	Amortization of investment income differential	HECO-WP-H-003	194		
2d	Income tax on items to be replaced by synchronized interest	HECO-WP-H-003	(14,210)		
2e	CA Adjustment to Remove Accrued Earnings Sharing Refund				1,156
3	Ratemaking Basis Amounts - Post Tax	Sum Lines 1 & 2	<b>\$ 111,714</b>	\$ 1,531,776	
4	<u>Ratemaking Capitalization</u>		Balances	Ratios	Cost Rate
5	Short-Term Debt (12 mo. Avg)		\$ 38,210	2.35%	1.75%
6	Long-Term Debt (Simple Avg)		\$ 624,620	38.36%	5.88%
7	Hybrid Securities (Simple Avg)		\$ 27,994	1.72%	7.36%
8	Preferred Stock (Simple Avg)		\$ 20,806	1.28%	5.46%
9	Common Equity (Simple Avg)		\$ 916,533	56.29%	10.00%
10	Total Capitalization	HECO-WP-H-004	<b>\$ 1,628,163</b>	<b>100.00%</b>	<b>8.11%</b>
11	Line 3 Rate Base Amount			\$ 1,531,776	
12	Weighted Cost of Debt			2.42%	
13	Synchronized Interest Expense			\$ 37,003	
	Income Tax Factor			1.636929121	
13a	Synchronized Interest Expense, net of tax			\$ 22,605	
14	Post Tax Income Available for Preferred & Common (Line 3 - Line 13a)				<b>\$ 89,109</b>
17	Less: Preferred Income Requirement (Line 8 Weighted Cost times Rate Base)				1,069
18	Income Available for Common Stock				<b>\$ 88,040</b>
19	Ratemaking Equity Investment (Line 9 Ratio times Rate Base)				862,274
20	Return on Equity for Decoupling Earnings Sharing				<b>10.21%</b>
21	<u>Earnings Sharing Revenue Credits:</u>		Basis Points		
22	Achieved ROE (basis points)		<b>1,021</b>		
23	Authorized Return (basis points)		1,000		
24	ROE for sharing (basis points)		<b>21</b>		
25	Sharing Grid per RAM Provision		First 100 bp	Next 200 bp	All over 300 bp
26	Distribution of Excess ROE (basis points)		<b>21</b>	0	0
27	Ratepayer Share of Excess Earnings		25%	50%	90%
28	Ratepayer Earnings Share - Basis Points		<b>5</b>	-	-
29	Revenue Credit per Basis Point (Note 2)				\$ 155
30	Earnings Sharing Revenue Credits (thousands)				<b>\$ 814.27</b>

## Footnotes:

1	Composite Federal & State Income Tax Rate	38.91%
	Income Tax Factor (1 / 1-tax rate)	1.636929121
2	Ratemaking Equity Investment (line 19)	\$ 862,274
	Basis Point = 1/100 of a percent	0.01%
	Earnings Required per Basis Point (thousands)	\$ 86.23
	Times: Income Tax Conversion Factor	1.636929121
	Pretax Income Required per Basis Point (thousands)	\$ 141
	Times: Revenue Tax Conversion Factor	1.0975
	Revenue Requirement per Basis Point (thousands)	\$ 155

Reference  
**HAWAIIAN ELECTRIC COMPANY, INC.**  
**DECOUPLING CALCULATION WORKBOOK**  
**EARNINGS SHARING CALCULATIONS**  
 All Amounts \$000 (Except %)  
 page 8

Line No.	Description (a)	Reference (b)	Rate-making Basis Return on Equity		
			Operating Income (c)	Rate Base (d)	Rate of Return (e)
1	Reported Operating Income before ratemaking adjustment	Dec 2013 Mo. PUC rpt, pg 2A filed 2/21/14 & HECO-WP-H-001	\$ 117,175	\$ 1,662,020	
2	<u>Ratemaking Adjustments to Line 1:</u>				
2a	Incentive Compensation Expenses (net of tax)	HECO-WP-H-002	3,527		
2b	Discretionary and Other Expenses Not Recoverable (net of tax)	HECO-WP-H-002	572		
2c	Amortization of investment income differential	HECO-WP-H-003	185		
2d	Income tax on items to be replaced by synchronized interest	HECO-WP-H-003	(15,726)		
2e	Remove Accrued Earnings Sharing Refund	HECO-WP-H-005	283		
3	Ratemaking Basis Amounts - Post Tax	Sum Lines 1 & 2	\$ 106,016	\$ 1,662,020	
4	<u>Ratemaking Capitalization</u>		Balances	Ratios	Cost Rate
5	Short-Term Debt (12 mo. Avg)		\$ 38,210	2.35%	1.75%
6	Long-Term Debt (Simple Avg)		\$ 624,620	38.36%	5.86%
7	Hybrid Securities (Simple Avg)		\$ 27,994	1.72%	7.36%
8	Preferred Stock (Simple Avg)		\$ 20,806	1.28%	5.46%
9	Common Equity (Simple Avg)		\$ 916,533	56.29%	10.00%
10	Total Capitalization	HECO-WP-H-004	\$ 1,628,163	100.00%	8.11%
11	Line 3 Rate Base Amount			\$ 1,662,020	
12	Weighted Cost of Debt			2.42%	
13	Synchronized Interest Expense			\$ 40,150	
	Income Tax Factor			1.636929121	
13a	Synchronized Interest Expense, net of tax			\$ 24,528	
14	Post Tax Income Available for Preferred & Common (Line 3 - Line 13a)				\$ 81,488
17	Less: Preferred Income Requirement (Line 8 Weighted Cost times Rate Base)				1,160
18	Income Available for Common Stock				\$ 80,328
19	Ratemaking Equity Investment (Line 9 Ratio times Rate Base)				935,592
20	Return on Equity for Decoupling Earnings Sharing				8.59%
21	<u>Earnings Sharing Revenue Credits:</u>		Basis Points		
22	Achieved ROE (basis points)		859		
23	Authorized Return (basis points)		1,000		
24	ROE for sharing (basis points)		-		
25	Sharing Grid per RAM Provision		First 100 bp	Next 200 bp	All over 300 bp
26	Distribution of Excess ROE (basis points)		0	0	0
27	Ratepayer Share of Excess Earnings		25%	50%	90%
28	Ratepayer Earnings Share - Basis Points		-	-	-
29	Revenue Credit per Basis Point (Note 2)				\$ 168
30	Earnings Sharing Revenue Credits (thousands)				\$ -

## Footnotes:

1	Composite Federal & State Income Tax Rate	38.91%
	Income Tax Factor ( 1 / 1-tax rate)	1.636929121
2	Ratemaking Equity Investment (line 19)	\$ 935,592
	Basis Point = 1/100 of a percent	0.01%
	Earnings Required per Basis Point (thousands)	\$ 93.56
	Times: Income Tax Conversion Factor	1.636929121
	Pretax Income Required per Basis Point (thousands)	\$ 153
	Times: Revenue Tax Conversion Factor	1.0975
	Revenue Requirement per Basis Point (thousands)	\$ 168

Reference  
HAWAIIAN ELECTRIC COMPANY, INC.  
DECOUPLING CALCULATION WORKBOOK  
EARNINGS SHARING CALCULATIONS  
All Amounts \$000 (Except %)  
page 8

Line No.	Description (a)	Reference (b)	Ratemaking Basis Return on Equity		
			Operating Income (c)	Rate Base (d)	Rate of Return (e)
1	Reported Operating Income before ratemaking adjustment	Dec 2014 Mo. PUC rpt, pg 2A filed 2/26/15 & HECO-WP-H-001	\$ 132,224	\$ 1,756,212	
2	<u>Ratemaking Adjustments to Line 1:</u>				
2a	Incentive Compensation Expenses (net of tax)	HECO-WP-H-002	4,552		
2b	Discretionary and Other Expenses Not Recoverable (net of tax)	HECO-WP-H-002	543		
2c	Amortization of Investment income differential	HECO-WP-H-003	185		
2d	Income tax on items to be replaced by synchronized interest	HECO-WP-H-003	(16,253)		
2e	Remove Accrued Earnings Sharing Refund	HECO-WP-H-005	0		
3	Ratemaking Basis Amounts - Post Tax	Sum Lines 1 & 2	\$ 121,251	\$ 1,756,212	
4	<u>Ratemaking Capitalization</u>		Balances	Ratios	Cost Rate
5	Short-Term Debt (12 mo. Avg)		\$ 38,210	2.35%	1.75%
6	Long-Term Debt (Simple Avg)		\$ 824,620	38.36%	5.88%
7	Hybrid Securities (Simple Avg)		\$ 27,984	1.72%	7.36%
8	Preferred Stock (Simple Avg)		\$ 20,806	1.28%	5.46%
9	Common Equity (Simple Avg)		\$ 916,533	56.29%	10.00%
10	Total Capitalization	HECO-WP-H-004	\$ 1,828,163	100.00%	8.11%
11	Line 3 Rate Base Amount			\$ 1,756,212	
12	Weighted Cost of Debt (Sum Lines 5-7)			2.42%	
13	Synchronized Interest Expense Income Tax Factor (Note 1)			\$ 42,425	
13a	Synchronized Interest Expense, net of tax			\$ 25,917	
14	Post Tax Income Available for Preferred & Common (Line 3 - Line 13a)				\$ 85,334
17	Less: Preferred Income Requirement (Line 8 Weighted Cost times Rate Base)				1,225
18	Income Available for Common Stock				\$ 94,109
19	Ratemaking Equity Investment (Line 9 Ratio times Rate Base)				988,615
20	Return on Equity for Decoupling Earnings Sharing (Line 18/Line 19)				9.52%
21	<u>Earnings Sharing Revenue Credits:</u>		Basis Points		
22	Achieved ROE (basis points)		952		
23	Authorized Return (basis points) (D&O 30505 in Dkt No. 2010-0080, filed on June 29, 2012)		1,000		
24	ROE for sharing (basis points)		-		
25	Sharing Grid per RAM Provision		First 100 bp	Next 200 bp	All over 300 bp
26	Distribution of Excess ROE (basis points)		0	0	0
27	Ratepayer Share of Excess Earnings		25%	50%	90%
28	Ratepayer Earnings Share - Basis Points		-	-	-
29	Revenue Credit per Basis Point (Note 2)				\$ 176
30	Earnings Sharing Revenue Credits (thousands)				\$ -

## Footnotes:

1	Composite Federal & State Income Tax Rate	38.91%
	Income Tax Factor ( 1 / 1-tax rate)	1.636929121
2	Ratemaking Equity Investment (line 19)	\$ 988,615
	Basis Point = 1/100 of a percent	0.01%
	Earnings Required per Basis Point (thousands)	\$ 68.88
	Times: Income Tax Conversion Factor	1.636929121
	Pretax Income Required per Basis Point (thousands)	\$ 162
	Times: Revenue Tax Conversion Factor	1.0975
	Revenue Requirement per Basis Point (thousands)	\$ 176

Reference  
HAWAIIAN ELECTRIC COMPANY, INC.  
DECOUPLING CALCULATION WORKBOOK  
EARNINGS SHARING CALCULATIONS  
All Amounts \$000 (Except %)  
page 8

Line No.	Description (a)	Reference (b)	Ratemaking Basis Return on Equity		
			Operating Income (c)	Rate Base (d)	Rate of Return (e)
1	Reported Operating Income before ratemaking adjustment	Dec 2015 Mo. PUC rpt. pg 2A filed 2/23/16 & HECO-WP-H-001	\$ 131,267	\$ 1,814,077	
2	<u>Ratemaking Adjustments to Line 1:</u>				
2a	Incentive Compensation Expenses (net of tax)	HECO-WP-H-002	3,367		
2b	Discretionary and Other Expenses Not Recoverable (net of tax)	HECO-WP-H-002	910		
2c	Amortization of investment income differential	HECO-WP-H-003	185		
2d	Income tax on items to be replaced by synchronized interest	HECO-WP-H-003	(16,672)		
2e	Remove Accrued Earnings Sharing Refund	HECO-WP-H-005	0		
3	Ratemaking Basis Amounts - Post Tax	Sum Lines 1 & 2	\$ 118,657	\$ 1,814,077	
4	<u>Ratemaking Capitalization</u>		Balances	Ratios	Cost Rate
5	Short-Term Debt (12 mo. Avg)		\$ 38,210	2.35%	1.75%
6	Long-Term Debt (Simple Avg)		\$ 624,620	38.38%	5.68%
7	Hybrid Securities (Simple Avg)		\$ 27,994	1.72%	7.36%
8	Preferred Stock (Simple Avg)		\$ 20,808	1.28%	5.46%
9	Common Equity (Simple Avg)		\$ 918,533	56.29%	10.00%
10	Total Capitalization	HECO-WP-H-004	\$ 1,628,183	100.00%	8.11%
11	Line 3 Rate Base Amount			\$ 1,814,077	
12	Weighted Cost of Debt (Sum Lines 5-7)			2.42%	
13	Synchronized Interest Expense Income Tax Factor (Note 1)			\$ 43,823	
13a	Synchronized Interest Expense, net of tax			1,636,929	
14	Post Tax Income Available for Preferred & Common (Line 3 - Line 13a)				\$ 92,086
17	Less: Preferred Income Requirement (Line 8 Weighted Cost times Rate Base)				1,266
18	Income Available for Common Stock				\$ 90,820
19	Ratemaking Equity Investment (Line 9 Ratio times Rate Base)				1,021,189
20	Return on Equity for Decoupling Earnings Sharing (Line 18/Line 19)				8.89%
21	<u>Earnings Sharing Revenue Credits:</u>		Basis Points		
22	Achieved ROE (basis points)		889		
23	Authorized Return (basis points) (D&O 30505 in Dkt No. 2010-0080, filed on June 29, 2012)		1,000		
24	ROE for sharing (basis points)		-		
25	Sharing Grid per RAM Provision		First 100 bp	Next 200 bp	All over 300 bp
26	Distribution of Excess ROE (basis points)		0	0	0
27	Ratepayer Share of Excess Earnings		25%	50%	90%
28	Ratepayer Earnings Share - Basis Points		-	-	-
29	Revenue Credit per Basis Point (Note 2)				\$ 183
30	Earnings Sharing Revenue Credits (thousands)				\$ -

## Footnotes:

1	Composite Federal & State Income Tax Rate	38.91%
	Income Tax Factor ( 1 / 1-tax rate)	1.636929121
2	Ratemaking Equity Investment (line 19)	\$ 1,021,189
	Basis Point = 1/100 of a percent	0.01%
	Earnings Required per Basis Point (thousands)	\$ 102.12
	Times: Income Tax Conversion Factor	1.636929121
	Pretax Income Required per Basis Point (thousands)	\$ 167
	Times: Revenue Tax Conversion Factor	1.0975
	Revenue Requirement per Basis Point (thousands)	\$ 183

HAWAIIAN ELECTRIC CO., INC.  
ADJUSTMENT TO RATE BASE FOR REG ASSET ON EOTP, CIP, CIS

								DR / (CR)	DR / (CR)	DR / (CR)	
	+ = addback										
	- = deduct										
	2011	2012	2013	2014	2015	2016	2017	Cumulative	32.8947%	6.0150%	
	Add'l Debt	Add'l Debt	Add'l Debt	Add'l Debt	Add'l Debt	Add'l Debt	Add'l Debt	Add'l Debt	Def Fed	Def State	
										Total	
										Def Tax	
EOTP Interest (7/11 - 3/12)	450,028	140,706						590,734	194,320	35,533	229,853
EOTP amort beg 4/12		(73,845)	(98,460)	(98,460)	(98,460)	(98,460)	(98,460)	(566,145)	(188,232)	(34,054)	(220,286)
Total EOTP	450,028	66,861	(98,460)	(98,460)	(98,460)	(98,460)	(98,460)	24,589	8,088	1,479	9,567
CIP Interest (7/11 - 5/13)	415,582	728,147	320,463					1,462,192	480,984	87,951	568,935
CIP amort beg 6/13		(142,158)	(243,699)	(243,699)	(243,699)	(243,699)	(243,699)	(1,116,954)	(387,419)	(87,185)	(434,604)
Total CIP	415,582	726,147	176,305	(243,699)	(243,699)	(243,699)	(243,699)	345,238	113,565	20,766	134,331
CIS interest (5/12 - 5/13)		545,064	152,938					698,002	229,606	41,985	271,591
CIS amort beg 6/13			(33,931)	(58,167)	(58,167)	(58,167)	(58,167)	(268,599)	(87,697)	(18,038)	(103,733)
Total CIS		545,064	119,007	(58,167)	(58,167)	(58,167)	(58,167)	431,403	141,909	25,949	167,858
TOTAL	865,610	1,338,072	188,852	(400,326)	(400,326)	(400,326)	(400,326)	801,230	263,562	48,194	311,756

The GL balance includes the AFUDC debt and the AFUDC additional debt.  
The Rate base balance includes just the AFUDC debt.  
The difference between GL and Rate base balance is the AFUDC additional debt.



HAWAIIAN ELECTRIC CO., INC.  
CIS PROJECT BASIS

		Basis					ADIT		
		Book	Fed Tax	State Tax	Fed Book - Tax Diff	State Book - Tax Diff	Federal 35.00000%	State 6.01504%	Total
CIS Book Basis	#186050	38,927,304	38,927,304	38,927,304					
	#18670201	2,474,707	2,474,707	2,474,707					
	#18670202	1,019,491	1,019,491	1,019,491					
	#18670203	65,648	65,648	65,648					
Total Book Basis		42,487,150	42,487,150	42,487,150					
AFUDC			(7,123,933)	(7,123,933)					
Writedown of CIS Costs		(29,000,000)	(29,000,000)	(29,000,000)					
		13,487,150	6,363,217	6,363,217					
Book / Tax Bases Differences			(2,400,052)	(2,400,052)					
Post Go Live carrying charge		282,815							
Amortization - 2012		-	(2,421,934)	(880,703)					
Amortization - 2013		(669,373)	(660,462)	(1,320,923)					
Balance as of 12/31/13		13,100,592	880,769	1,761,539	12,219,823	11,339,053	(4,038,221)	(682,048)	(4,720,269)
Amortization - 2014		(1,147,497)	(660,462)	(1,320,923)					
Balance as of 12/31/14		11,953,095	220,307	440,616	11,732,788	11,512,479	(3,864,108)	(692,480)	(4,556,588)
Amortization - 2015	Note 1	(1,147,497)	(220,307)	(440,616)					
Balance as of 12/31/15		10,805,598	-	-	10,805,598	10,805,598	(3,554,473)	(649,961)	(4,204,434)
Amortization - 2016		(1,147,497)	-	-					
Balance as of 12/31/16		9,658,101	-	-	9,658,101	9,658,101	(3,177,007)	(580,938)	(3,757,945)
Amortization - 2017		(1,147,497)	-	-					
Balance as of 12/31/17		8,510,604	-	-	8,510,604	8,510,604	(2,799,541)	(511,916)	(3,311,457)

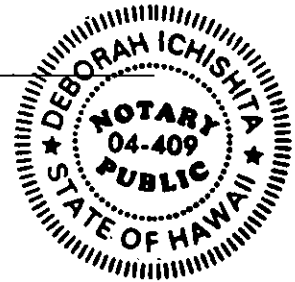
Note 1 > For tax purposes, CIS costs are amortized over 36 months and are fully amortized in 2015.

VERIFICATION

STATE OF HAWAII )  
 )  
CITY AND COUNTY OF HONOLULU ) ss.

Joseph P. Viola, being first duly sworn, deposes and says: That he is Vice President, Regulatory Affairs, of Hawaiian Electric Company, Inc., Applicant in the above proceeding; that he makes this verification for and on behalf of Hawaiian Electric Company, Inc., and is authorized so to do; that he has read the foregoing Application, and knows the contents thereof; and that the same are true of his own knowledge except as to matters stated on information or belief, and that as to those matters he believes them to be true.

  
Joseph P. Viola



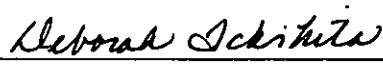
Subscribed and sworn to before  
me this 31<sup>st</sup> day of March, 2017.

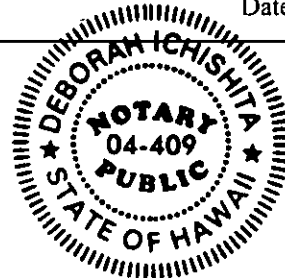


**DEBORAH ICHISHITA**

Notary Public, State of Hawaii

My Commission expires July 18, 2020

<b>STATE OF HAWAII NOTARY CERTIFICATION</b>	
Doc. Date: <u>3/31/2017</u>	# of pages <u>202</u>
Notary Name: <u>DEBORAH ICHISHITA</u> First Circuit	
Doc. Description: <u>Hawaiian Electric</u>	
Transmittal No. <u>17-02 (Decoupling)</u>	
	<u>3/31/17</u>
Notary Signature	Date



CERTIFICATE OF SERVICE


I hereby certify that the foregoing Transmittal No. 17-02 was served on the date of filing  
by hand delivery, as indicated below.

Dean Nishina  
Executive Director  
Division of Consumer Advocacy  
Department of Commerce and Consumer Affairs  
335 Merchant Street, Room 326  
Honolulu, Hawai'i 96813

2 copies  
via Hand Delivery

Dated: Honolulu, Hawai'i, March 31, 2017.

HAWAIIAN ELECTRIC COMPANY, INC.

  
\_\_\_\_\_  
Michael Chu